

Wireless Earphone User' s Guide



Model : Dongle – Opera s1d

Ear set – Opera s1e

Thank you for purchasing this product.

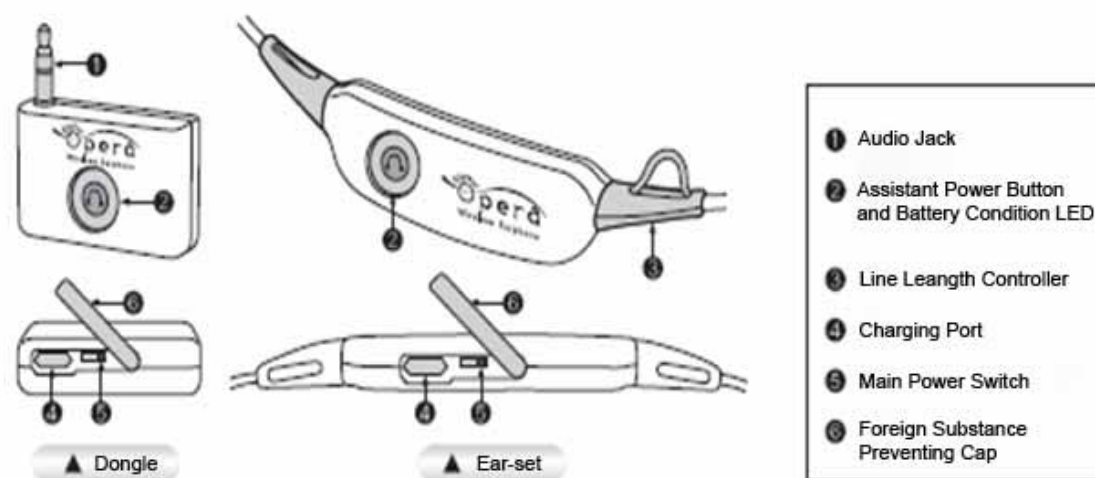
This product has been designed and developed with Kleer Audio Solution using 2.4GHz ISM Band to allow users to enjoy clear original sound.

It provides more comfortable feelings with ultra light designing. This product also has selected premium kernel method of 13.5mm unit, promising a stronger mid-to-low sound compared with the ordinary 95mm products

Please read carefully through this guide before using the product.

Product quality assurance is included to be kept and utilized anytime necessary.

1. Features



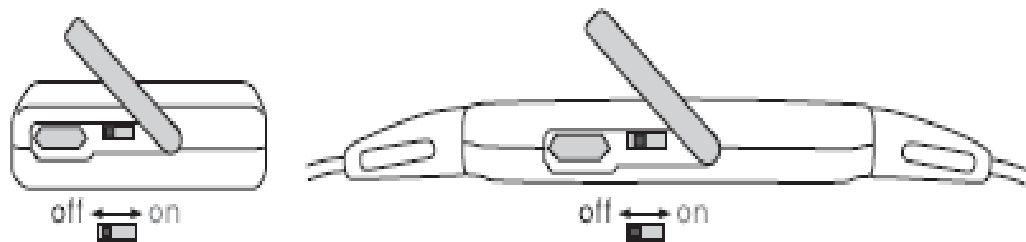
2. Accessories



3. Before the first use after opening the box

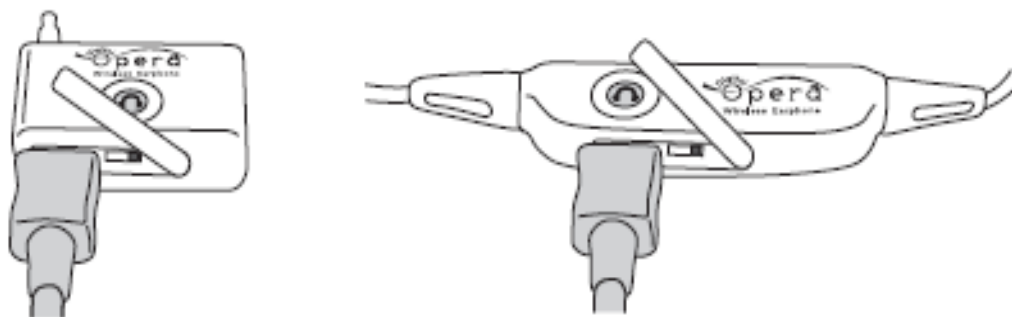
1. Turn on the main power by sliding switch to the opposite direction of the charging port, after opening the foreign substance preventing cap attached to each dongle and ear-set. It is convenient to use sharp tools like pencil or edge of charging cable connector when sliding.

(To prevent complete discharge of battery due to long term left-out, main power of dongle and ear-set are turned off.)



2. Please charge the battery enough for more than 2 hours.

* Red LED on the power button is on while charging and LED is turned off when charging is completed.

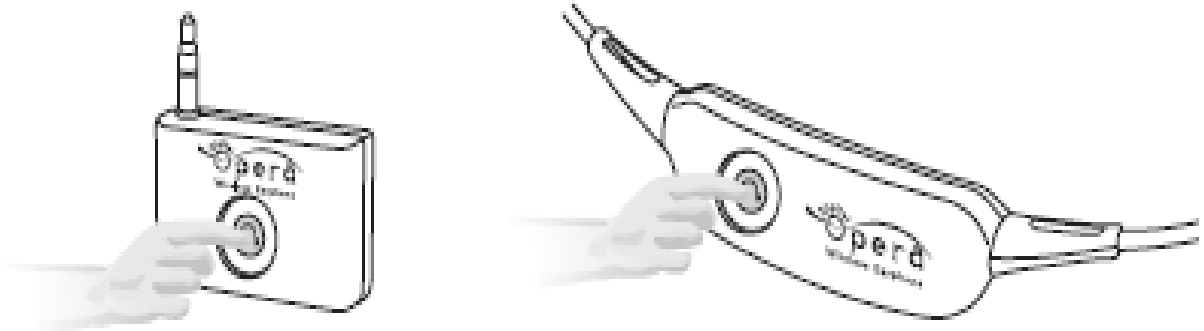


3. Charging is not possible when main power is turned off.

4. Music is not played while charging.

4. How to Pairing (Mutual Synchronization of dongle and ear-set)

1. This product is packed with complete pairing of dongle and ear-set at the time of delivery from the factory.
2. If pairing is not set, follow steps described below.
3. Remove charging cable from charging port of dongle and ear-set when the product is fully charged.
4. Then power off both dongle and ear-set by pressing power button for about 1 second.



5. Then simultaneously press assistant power button of dongle and ear-set for about 3 seconds.
 - If there is longer than a second time difference, pairing setting cannot be completed. In this case, please try again from step 4.
6. Orange LED light is quickly turned off after about 3 seconds.
7. If you put our hand away from the button, LED is turned off little slowly.
8. Slowly turning off LED means dongle and ear-set is trying a pairing process.
9. Slowly processed LED lighting off is for 3 seconds to complete pairing setting, and LED of dongle is turned off again quickly. LED of ear-set is changed to normal lighting off cycle of approximately 3~4 seconds.

10. Another quick turning off of dongle LED is for the pairing of additional ear-set. This would last for about 15 seconds. If we press assistant power button of another powered-off ear-set for 3 seconds, additional pairing is completed as in step 6~9.

11. When pairing is completed, dongle and ear-set maintains simultaneous lighting off for 3~4 seconds for giving and receiving signs.

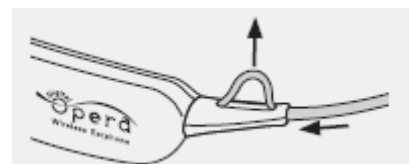
12. for the additional pairing of ear-set,

- turn off assistant power button of ear-set of complete pairing.
 - operate ear-set to be paired additionally with dongle as in step 4~7.
 - Turn on the assistant power of ear-set, which was initially turned off.
 - Additional pairing is completed.
 - When dongle and 2 ear-sets do not simultaneously turned off, lightly press assistant power button of dongle, automatically processing each pairing.
 - Then third and fourth ear-set will be paired in the same way.
- * Set pairing will be maintained regardless of power condition, and lightly press assistant power of dongle when pairing is not completed at the time of assistant power is on.

13. Pairing is only one-time process, and automatic pairing is completed when turned on even if main power is off.

5. Earphone Length Adjustment

As in picture on the right, length of the line can be adjusted so that earphones are not falling off when strong activity or exercises.



6. Please Read Carefully Cautions

A. Reception is not good and sound is blocked! Why is that?

- 1) Keep dongle away from the body since frequency number using 2.4GHz range cannot go through human body. Location of dongle should be in outside direction.

2) Do not wrap over ear-set receptor with thick muffler or coat collar.

3) Please use this product away from wireless base station and Wireless LAN since they may cause interference of electric wave.

4) Please use this product away from transmission tower, telegraph pole, or high frequency using factories since they may cause confusion.

B. Power is not on! Is there a problem in the product?

1) Please check main power switch of dongle and ear-set.

2) Please check battery condition.

C. I cannot hear any sound! What can I do?

1) Please check if dongle and ear-set are paired.

2) Please try to use again after complete charge.

D. What is pairing?

1) It is synchronization of dongle and ear-set to mutual exchange of information. This product is packed after pairing is completed.

E. I cannot charge! What happened?

1) If main power switch is off for dongle and ear-set, charging process does not work.

F. How can I check charge condition LED?

1) When the product is connected to the power with USB charging cable, red LED is on. After charging is completed, LED is automatically off.

G. Does this product support automatic power-saving mode?

1) Power of dongle or ear-phone is off after 1 minute of no output signals of audio or main power of media player (PMP, MP3P, CDP) is turned off. It supports power saving mode to prevent unnecessary battery use-up.

H. How long is the battery using time?

1) For listening to the music, maximum of 10 hours of continuous use is possible based on user environment.

2) When dongle or ear-set main power is turned off, leftover is maintained for about 3 months.

3) When assistant power is off and main power is on, leftover is maintained for about 7 days.

I. Is it possible to listen to the same music with family or friend by using additional ear-set?

1) This product supports multi pairings, so maximum of 4 ear-set reception setting is possible for 1 dongle. 4 people can share the music simultaneously.

J. Can I use this product in sauna?

1) This product is not waterproof, so please keep it away from sauna, bathtub, or swimming pool. Please give an extra care when it snows or rains.

K. Audio jack of dongle and audio port of medial player (PMP, MP3P, CDP) does not attached together!

1) Please use audio connecting cable included in the package when port and jack attachment does not work due to port location by producers.

L. Audio jack of dongle and audio port of cell phone is not accord.

1) Please purchase audio jack exchanging cable, connecting cell phone and dongle since audio ports of Samsung, LG, and Motorola are not standardized.

M. Can I charge this product with 220V general AC power?

1) Charging of this product is only possible by using USB power of PC, and you can purchase USB charging (5.7v 750mA) AC adaptor to use 220V general AC power.

7. Product specifications

General characteristics

1	range	About 25m indoor
2	Normal Operation time	8~9hours
3	Operating current	8~15mA
4	Standby current	0.25~0.35mA
5	Weight	Receiver(earbud):20g, transmitter (adaptor):12g
6	antenna	Earbud: dual diversity antenna Adaptor: single chip antenna
7	Rechargeable battery time	2~3 hours

Audio characteristics

1	Audio frequency response	20Hz ~ 20kHz
2	Distortion	<0.1%(20Hz~20KHz)
3	Signal to Noise Ratio	Typical 86 dB
4	Ear speaker impedance	32 Ohm
5	Sampling frequency	Max 44.1KHz

Radio characteristics

1	Frequency range	2400~2480MHz
2	Channel space	5MHz(16Channels)
3	Sensitivity	Typical -86dBm(@ 18% per)
4	Transmission power	Typical -5dBm
5	Data rate	2.37Mbps
6	Adjacent channel rejection	25dB
7	Alternate channel rejection	40dB
8	Regulatory compliance	ETS300-200(EU) FCC15.247(US) ARIB STD-66 TELEC(JAPAN),EMI(KOREA)

Consumer Compensation for the Loss

1. When the product has a trouble about its feature or function in natural condition.

Consumer damage	Compensation	
	In the term of guarantee	After the term of guarantee
Important repair is required in 10 days after purchase	Exchange of product or refund	
Repair of important parts is required in a month after purchase	Product exchange	
Important repair is required in a month after exchange	Refund	
When exchange is impossible		
Repair or damage occurrence	Repair without charge	Repair with additional charge
Repaired but having same problem again	Exchange or refund	Refund with 10% depreciation to the purchasing
When repair is impossible		
When product is missing by business unit		

2. Problems in features or functions by consumer's mistake

Consumer damage	Compensation	
	In the term of guarantee	After the term of guarantee
When repair is possible	Repair with additional charge	Repair with additional charge
When repair is impossible	Exchange with additional charge of repair	N/A

“CAUTION : Exposure to Radio Frequency Radiation.

Antenna shall be mounted in such a manner to minimize the potential for human contact during normal operation.

The antenna should not be contacted during operation to avoid the possibility of exceeding the FCC radio frequency exposure limit.

Product Assurance	
Product Name : Digital Opera	
Equipment Name : Wireless Earphone	Model Name : Dongle – Opera s1d, Ear set – Opera s1e
Product Date : 2008.04	Term of Guarantee : 1 year from the purchase
Certification Company : Digifi Co.,Ltd.	Producer/Country : Digifi Co.,Ltd. / Korea
Identification Code :	
Purchase Date :	
Customer Name :	Phone :
Address :	
Agency Name :	
Address :	

Quality of the product you have purchased is guaranteed for 1 year. Sales product is produced under rigorous quality management. When problem occurred in the term of guarantee, we exchange or repair parts for free of charge. Please register product number by mail or on-line. Also, this product is protected under a liability of reparation insurance.

Sales & AS (Customer Service Center) BIGBEAM : 1544-0904

Customer Service Center: 1544-0904

If any problem occurs while using this product or if you have any question regarding this product, please call customer service center to above toll-free number. We promise you to always provide a sincere and prompt service. Thank you.

Producer: Digifi Co.,Ltd..

Sales and AS: BIGBEAM/46-1 Wonhyoro 3-ga, Yongsan-gu, Seoul/TEL.1544-0904



FCC Information

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 interface, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for CLASS B digital device, pursuant to Part 15 of 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 instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try correct the interference by one or more of the following measures:

- 1.1. Reorient or relocate the receiving antenna.
- 1.2. Increase the separation between the equipment and receiver.
- 1.3. Connect the equipment into an outlet on a circuit different from that to which receiver is connected.
- 1.4. Consult the dealer or experienced radio/TV technician for help.

WARNING

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.