

microlab

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just listen



Orb
User Manual



www.microlab-global.com
Microlab Electronics Co., Ltd
Made in China



FCC ID: OR8-ORB
IC: 21231-ORB

Powered Cinematic Speakers with HC'D
and Bluetooth® Wireless Technology

Important Safety Instructions

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket or table specified by the manufacturer. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when used for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally or has been dropped.

Where the MAINS plug is used as the disconnect device shall remain readily operable.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



This equipment is a Class II or double insulated electrical appliance. It has been designed in such a way that does not require a safety connection to electrical earth.



CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN



The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

15. The highest environmental temperature suitable for this product is 0°C to 35°C for indoor use only.

16. Applicable to altitude below 2000 meters



DU When apparatus operation and installation instructions contain instructions contain instructions for use by service personnel, such instructions shall be separate in format from other instructions and preceded by the word "CAUTION" and the following or the equivalent. *These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so"

MESURES DE SÉCURITÉ IMPORTANTES

1. Lisez ces instructions.
2. Conservez ces instructions.
3. Respectez tous les avertissements.
4. Suivez toutes les instructions.
5. N'utilisez pas cet appareil près de l'eau.
6. Nettoyez uniquement avec un linge sec.
7. Les fentes et ouvertures ne doivent jamais être bloquées ni recouvertes. Toute installation de l'appareil doit respecter les instructions du fabricant.
8. Ce produit doit être éloigné des sources de chaleur comme celles des radiateurs, des contrôleurs de chaleur, des cuisinières ou d'autres produits (incluant les amplificateurs) produisant de la chaleur.
9. Ne pas détériorer la sécurité de la fiche polarisée, ou de la fiche de terre. Une fiche dont une broche est plus large que l'autre est une fiche polarisée. Une fiche de type mise à la terre à deux broches, possédant une troisième broche de mise à la terre. La broche plus large ou mise à la terre s'agit d'une mesure de sécurité. Cette fiche se branchera à la prise de courant d'une seule manière. Si vous ne pouvez pas l'insérer complètement dans la prise, contactez un électricien pour le remplacement de la prise défectueuse.
10. Les cordons d'alimentation doivent être orientés de façon à ne pas être piétinés, ou être coincés par des objets placés sur, ou contre eux. Portez une attention particulière aux cordons à fiche, aux prises de courant adéquates et aux points où les cordons sortent du produit.
11. Utilisez uniquement des accessoires recommandés par le fabricant.
12. Utilisez uniquement avec un chariot, un présentoir, un trépied, un support, ou une table recommandée par le fabricant, ou vendu avec le produit. La combinaison d'un appareil et d'un chariot doit être déplacée avec prudence.
13. Pour plus de protection pendant un orage, ou lorsque le produit est inutilisé pour de longues périodes de temps, débranchez-le de la prise de courant.
14. Confiez toute réparation au personnel qualifié. Une réparation est requise lorsque le cordon d'alimentation ou la fiche sont endommagés, si du liquide a été renversé sur le produit, ou si un objet est tombé à l'intérieur, si le produit a été exposé à la pluie ou à l'eau, si le produit ne fonctionne pas normalement, ou si le produit a été lâché des mains.

AVERTISSEMENT : La fiche d'alimentation fonctionne en tant que dispositif de déconnexion, elle doit rester toujours prête à fonctionner.

MISE EN GARDE : POUR RÉDUIRE LE RISQUE D'INCENDIE OU DE CHOC ÉLECTRIQUE, NE PAS EXPOSER L'APPAREIL À LA PLUIE OU À L'HUMIDITÉ.



Cet équipement est de classe II ou dispose d'une isolation double, et n'exige pas de mise à la terre.



MISE EN GARDE
RISQUE DE CHOC ÉLECTRIQUE NE PAS OUVRIR



Le symbole de l'éclair et d'une flèche à l'intérieur d'un triangle équilatéral signale à l'utilisateur, la présence d'une « tension dangereuse » non isolée à l'intérieur de l'appareil, pouvant être d'une magnitude suffisante pour provoquer un choc électrique.



Le point d'exclamation à l'intérieur d'un triangle équilatéral signale à l'utilisateur la présence d'instructions importantes concernant les soins et l'entretien (réparation) incluses dans la documentation accompagnant l'appareil.

FCC and Canada EMC Compliance Information

FCC 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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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 to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Caution: Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

ISED Statement

English: This device complies with Industry Canada license - exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

The digital apparatus complies with Canadian ICES - 003 (B)/NMB - 3(B).

- French: Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d' compromettre le fonctionnement. L'appareil numérique est conforme à la canadienne CAN ICES - 003 (B)/NMB - 3(B).

Radiation Exposure Statement

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

L'appareil a été évalué pour répondre aux exigences générales d'exposition aux radiofréquences.

L'appareil peut être utilisé en condition d'exposition portable sans restriction.

Introduction

Incorporating latest *Bluetooth*® wireless technology, this 2.1 subwoofer system lets you connect to your mobile phone or media player without cables. Using A2DP profile, it lets you stream stereo music wirelessly by connecting to any *Bluetooth*® wireless technology enabled products. Supports high resolution sound formats; AAC and aptX profiles.

Employing the latest proprietary HC²D sound technology, it creates very clear sound at close distance. No need to align your speakers to your listening position. With advanced Digital Signal Processor (DSP) to bring perfect clear sound to your ears.

Designed with beautiful gloss white finishes, this versatile home theater system fits perfectly in your AV room, living room, computer room or even your bedroom. Clear and powerful sound from its built-in amplifier within the superlative subwoofer design. Large 6.5" woofer driver and bass reflex port in subwoofer cabinet provides deeper bass effects. Small home cinematic arrangement creates better dynamic sound movements for realistic movie sound effects.

Ideal for digital movies, TV, PC/notebook, CD/DVD and multimedia application. Create your very own home theater easily with this powerful system.

Comes with two audio input methods, *Bluetooth*® wireless music transfer and traditional analog audio connection. Also featuring NFC connection; simply touch the remote control with the NFC enabled smartphone, and it will connect immediately to the system.

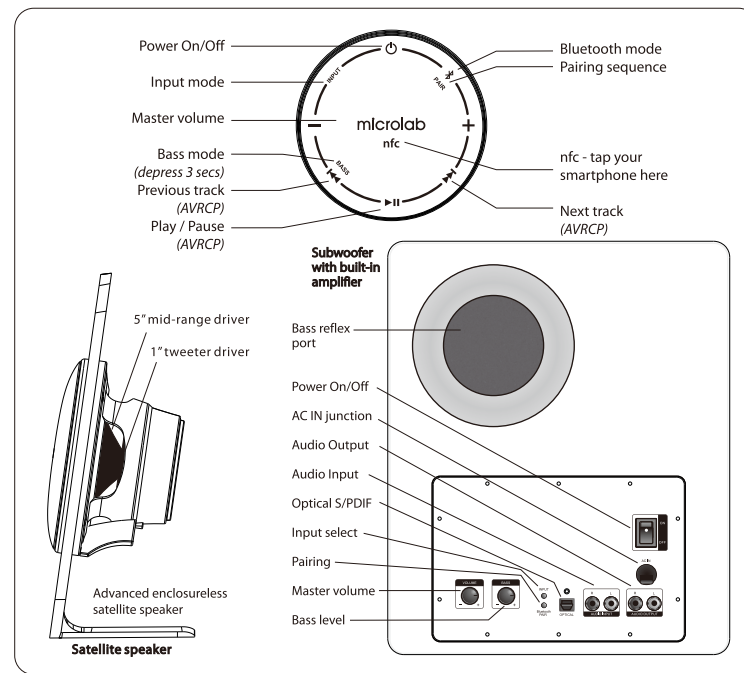
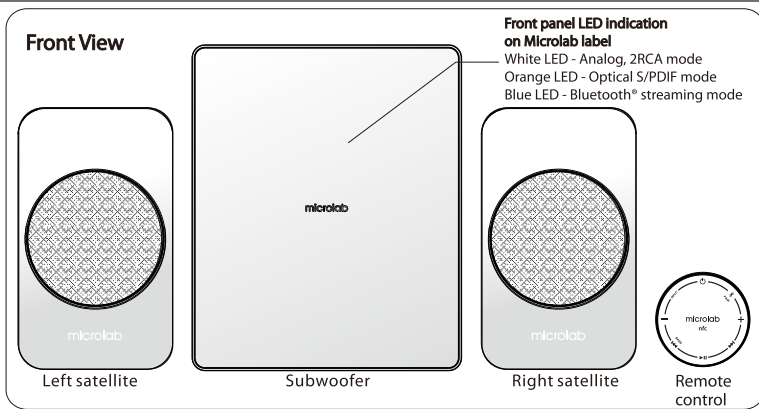
Features

- *Bluetooth*® wireless music transfer lets you play from your mobile and any *Bluetooth*® from your mobile and any *Bluetooth*® product with *Bluetooth*® headset protocol
- *Bluetooth*® stereo audio using A2DP for wireless music streaming; supports high resolution sound; AAC and aptX
- HC²D proprietary sound for clear sound reproduction
- Home cinematic system with depth and full range audio performances
- Powerful built-in amplifier with DSP for clear resolution
- NFC enabled remote control for one touch wireless connection
- Bass reflex port for deeper bass and vocal depth
- Large 8" woofer driver for massive bass drive
- 2.1 speaker setup, ideal for home theater
- Watch movies with sound effects, listen to music with clarity
- Includes optical S/PDIF connection for DVD or Blu-ray audio inputs

Package contents

- | | |
|------------------------------|-------|
| • Subwoofer | 1 pc |
| • Satellites | 2 pcs |
| • 3.5 mm stereo - 2RCA cable | 1 pc |
| • Optical S/PDIF cable | 1 pc |
| • Remote control | 1 pc |
| • User manual | 1 pc |

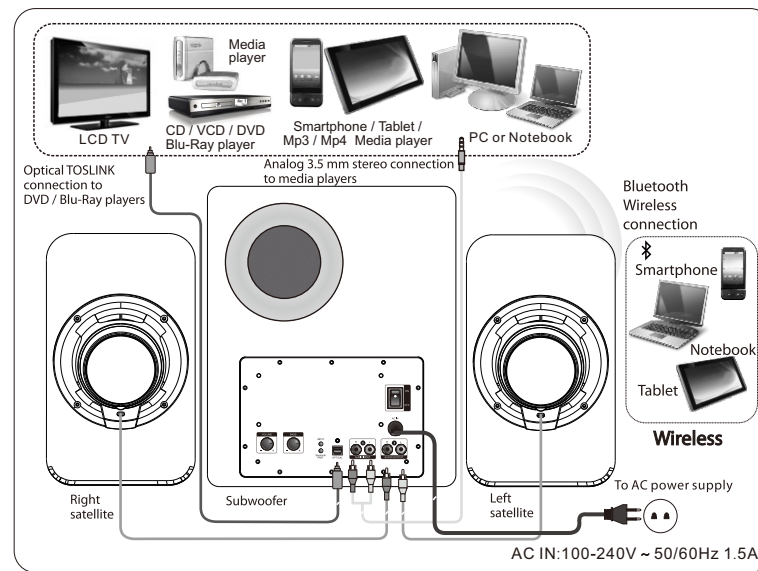
Illustrations



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Connections



Connections

Prior to connecting the speakers, ensure the AC power plug is unplugged from the AC source. Secondly ensure the volume knob is set to minimum. This system has 3 modes; Analog AUX (Audio Input) in white LED colour, Bluetooth® in blue LED colour, and Optical Input in orange LED colour.

1. Connect the satellites to the left and right RCA outputs at the rear panel of the subwoofer.
2. Place both satellites on extreme sides of the listening position.
3. Place the subwoofer on the floor and with its back near the wall for more bass.
4. Next, connect the power cable at the rear of the subwoofer to the AC power supply source. Please ensure the AC power supply match the power requirement printed at the rear panel.
5. For the remote control, please ensure fresh battery is correctly loaded.

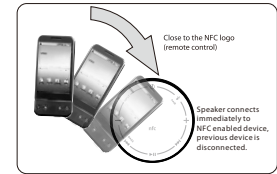
Wireless (Bluetooth®)

1. Please turn on the speaker system with the power switch located at the rear panel of the subwoofer. It will default to the analog Audio Input mode.
2. Please change the mode to the Bluetooth® mode by depressing the INPUT button at the rear of the subwoofer.
3. The system will commence the Bluetooth® pairing process immediately. The blue LED will blink rapidly. A voice alert will announce the change to this mode.
4. Have your Bluetooth® enabled device activated for Bluetooth broadcast. For connection to the speaker system, please ensure the Bluetooth® device supports A2DP profile.
5. Once your device detects the system system, it should display the "Orb" name on its display screen.
6. Select Pairing, and then connect functions to commence the A2DP audio streaming mode. The blue LED will illuminate steadily.
7. To disable the mode, simply *disconnect* the Bluetooth® connection in your device or depress the INPUT button to change to another mode. A voice alert will announce the change of the Bluetooth® mode to the Optical Input mode.

NFC (Nearfield communication)

This function allows any NFC enabled device to easily connect to the speaker system wirelessly with a single touch.

1. To use the NFC function, just hold the smartphone or NFC enabled device close to the NFC logo at the top of the remote control.
2. This will connect the system to this device, and disconnect any previous connected device.
3. Once connected, you can commence the music playback as mentioned above.
4. Music will be streamed wirelessly to the speaker system.



Technical Specifications

AMPLIFIER		INTERFACES	
Output power:	105 Watt RMS	Output:	2RCA
Power distribution:	25 Watt x 2 + 55 Watt RMS	Input:	2RCA, TOSLINK, Bluetooth® wireless technology v4.0, A2DP
Harmonic distortion:	< 0.5 % 1 W 1 kHz		
Frequency response:	40 Hz - 20 kHz		
Signal/Noise ratio:	> 80 dB		
Separation:	> 55 dB		
SPEAKERS		TECHNOLOGY	
Tweeter driver type:	1"	Audio:	HC ² D V1.0 DSP (Digital Signal Processor)
Tweeter impedance:	6 Ohm		AAC
Midrange driver type:	5"		aptX
Midrange impedance:	8 Ohm	Wireless:	Bluetooth® wireless technology
Woofer driver type:	8"		NFC (Near field communication)
Woofer impedance:	4 Ohm		

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Connections (continue)

Analog

1. Connect the included 3.5mm stereo - 2RCA cable to the rear *Audio Input* of the subwoofer.
2. Next connect the 3.5 mm plug end to your media device, such as Mp3/Mp4, CD/DVD player, LCD TV, smartphone, tablet, or notebook.
3. Depress the INPUT button till the front LED turns to white in colour.

Optical S/PDIF

1. Connect the TOSLINK cable to your DVD/Blu-ray player, and the other end to the subwoofer's TOSLINK port. This is located at the back of the subwoofer panel.
2. Depress the INPUT button till the front LED turns to orange in colour.
3. In your DVD/Blu-ray player setup screen, select PCM for its audio output.

Operations

1. Ensure the master volume is at the lowest setting.
2. Turn on the main AC power and switch on the speaker system from the rear power switch.
3. Select the correct INPUT mode by depressing the INPUT button at the rear of the subwoofer. Refer to the different mode colours as mentioned above.
4. Start the media player and song. For Bluetooth® enabled device, please start the music playback apps. For Analog connection, start the playback from the Mp3/Mp4 player or notebook, etc. For Optical connection, start the DVD/Blu-ray player's playback.
5. Adjust the volume on the media player, and speaker's master volume to your preferred listening level. The master volume is located at the rear panel of the subwoofer.
6. For added sound effects, you can adjust the bass level located at the rear panel of the subwoofer.
7. Note: it is advisable not to turn the volume too loud or to its extreme volume limit to avoid damage to the speaker driver material and impair your hearing. Always adjust in slow increment.
8. The system will conserve energy if there are no audio signal detected after 20 minutes, or the sound level is very soft. It will enter sleep mode till it detects audio signal again. The LED will not illuminate during the sleep mode.
9. To activate system, simply press the *POWER* on the R/F remoter control or select the *INPUT* button.
10. For remote control, please refer to previous illustration diagram.

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Frequently Asked Questions (FAQs)

Questions	Solutions
No Sound	Check if the audio source is working and mode set correctly. Check and ensure audio speaker cables are correctly connected. Check the Bluetooth® profile (s) are supported by your device. Check the DVD player has its Optical signal set to PCM mode.
What do the different LED colours indicate?	White LED indicates Analog mode - audio input via 2RCA Orange LED indicates Optical mode - audio input via TOSLINK Blue LED indicates Bluetooth® mode - audio input via Bluetooth® connection
What are the features of HC ² D and DSP?	HC ² D processes high quality clear sound through the speaker system at very close listening distance. DSP processes sound signal and enhances it to high resolution with minimum distortion audio output.
What are the products supported?	Any media player that supports either 1) 3.5 mm stereo jack, or 2) Bluetooth® V2.1 and above, 3) NFC, or 4) 2 RCA stereo jacks (separate cable or adapter required), or 5) DVD / Blu-ray player with TOSLINK interface
Sound output is distorted	Ensure the media file is recorded above 192 bit rate for better sound resolution with less sound distortion.

If the problem still exists, please contact the distributor or seek professional advice.

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