

*Desktop*  
**Telephony**  
from  **BLACK BOX**



## **2-in-1 Headset**

Black, HS201A  
Blueberry, HS202A  
Strawberry, HS203A  
Grape, HS204A  
Lime, HS205A

**FEDERAL COMMUNICATIONS COMMISSION  
AND  
INDUSTRY CANADA  
RADIO FREQUENCY INTERFERENCE STATEMENTS**

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his own expense will be required to take whatever measures may be necessary to correct the interference.

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

*This digital apparatus does not exceed the Class A limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada.*

*Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de classe A prescrites dans le Règlement sur le brouillage radioélectrique publié par Industrie Canada.*

## **FCC REQUIREMENTS FOR TELEPHONE-LINE EQUIPMENT**

1. The Federal Communications Commission (FCC) has established rules which permit this device to be directly connected to the telephone network with standardized jacks. This equipment should not be used on party lines or coin lines.
2. If this device is malfunctioning, it may also be causing harm to the telephone network; this device should be disconnected until the source of the problem can be determined and until the repair has been made. If this is not done, the telephone company may temporarily disconnect service.
3. If you have problems with your telephone equipment after installing this device, disconnect this device from the line to see if it is causing the problem. If it is, contact your supplier or an authorized agent.
4. The telephone company may make changes in its technical operations and procedures. If any such changes affect the compatibility or use of this device, the telephone company is required to give adequate notice of the changes.
5. If the telephone company requests information on what equipment is connected to their lines, inform them of:
  - a. The telephone number that this unit is connected to.
  - b. The ringer equivalence number.
  - c. The USOC jack required: RJ-11C.
  - d. The FCC registration number.

Items (b) and (d) can be found on the unit's FCC label. The ringer equivalence number (REN) is used to determine how many devices can be connected to your telephone line. In most areas, the sum of the RENs of all devices on any one line should not exceed five (5.0). If too many devices are attached, they may not ring properly.

6. In the event of an equipment malfunction, all repairs should be performed by your supplier or an authorized agent. It is the responsibility of users requiring service to report the need for service to the supplier or to an authorized agent.

### **CERTIFICATION NOTICE FOR EQUIPMENT USED IN CANADA**

The Canadian Department of Communications label identifies certified equipment. This certification means that the equipment meets certain telecommunications-network protective, operation, and safety requirements. The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single-line individual service may be extended by means of a certified connector assembly (extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility—in this case, your supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

### **CAUTION:**

Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

The LOAD NUMBER (LN) assigned to each terminal device denotes the percentage of the total load to be connected to a telephone loop which is used by the device, to prevent overloading. The termination on a loop may consist of any combination of devices, subject only to the requirement that the total of the load numbers of all the devices does not exceed 100.

## **NORMAS OFICIALES MEXICANAS (NOM) ELECTRICAL SAFETY STATEMENT**

### **INSTRUCCIONES DE SEGURIDAD**

1. Todas las instrucciones de seguridad y operación deberán ser leídas antes de que el aparato eléctrico sea operado.
2. Las instrucciones de seguridad y operación deberán ser guardadas para referencia futura.
3. Todas las advertencias en el aparato eléctrico y en sus instrucciones de operación deben ser respetadas.
4. Todas las instrucciones de operación y uso deben ser seguidas.
5. El aparato eléctrico no deberá ser usado cerca del agua—por ejemplo, cerca de la tina de baño, lavabo, sótano mojado o cerca de una alberca, etc..
6. El aparato eléctrico debe ser usado únicamente con carritos o pedestales que sean recomendados por el fabricante.

7. El aparato eléctrico debe ser montado a la pared o al techo sólo como sea recomendado por el fabricante.
8. Servicio—El usuario no debe intentar dar servicio al equipo eléctrico más allá a lo descrito en las instrucciones de operación. Todo otro servicio deberá ser referido a personal de servicio calificado.
9. El aparato eléctrico debe ser situado de tal manera que su posición no interfiera su uso. La colocación del aparato eléctrico sobre una cama, sofá, alfombra o superficie similar puede bloquea la ventilación, no se debe colocar en libreros o gabinetes que impidan el flujo de aire por los orificios de ventilación.
10. El equipo eléctrico deber ser situado fuera del alcance de fuentes de calor como radiadores, registros de calor, estufas u otros aparatos (incluyendo amplificadores) que producen calor.
11. El aparato eléctrico deberá ser conectado a una fuente de poder sólo del tipo descrito en el instructivo de operación, o como se indique en el aparato.
12. Precaución debe ser tomada de tal manera que la tierra física y la polarización del equipo no sea eliminada.
13. Los cables de la fuente de poder deben ser guiados de tal manera que no sean pisados ni pellizcados por objetos colocados sobre o contra ellos, poniendo particular atención a los contactos y receptáculos donde salen del aparato.
14. El equipo eléctrico debe ser limpiado únicamente de acuerdo a las recomendaciones del fabricante.
15. En caso de existir, una antena externa deberá ser localizada lejos de las líneas de energía.
16. El cable de corriente deberá ser desconectado del cuando el equipo no sea usado por un largo periodo de tiempo.

17. Cuidado debe ser tomado de tal manera que objetos líquidos no sean derramados sobre la cubierta u orificios de ventilación.
18. Servicio por personal calificado deberá ser provisto cuando:
  - A: El cable de poder o el contacto ha sido dañado; u
  - B: Objetos han caído o líquido ha sido derramado dentro del aparato; o
  - C: El aparato ha sido expuesto a la lluvia; o
  - D: El aparato parece no operar normalmente o muestra un cambio en su desempeño; o
  - E: El aparato ha sido tirado o su cubierta ha sido dañada.

**TRADEMARKS USED IN THIS MANUAL**

UL® is a registered trademark of Underwriters Laboratories Incorporated.

Any other trademarks mentioned in this manual are acknowledged to be the property of the trademark owners.



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# 1. Specifications

## Transmit:

**Distortion**—Less than 5%

**Frequency Response**—300 to 3000 Hz

**Microphone**—Noise-canceling electret

**Power**—Current consumption: 250  $\mu$ a @ 3 VDC; Operating voltage: 1.5 to 10 VDC

## Receive:

**Automatic Gain Control (AGC)**— -41 dBV with 1 kHz input

**Frequency Response**—300 to 3000 Hz

**Input Impedance**—300 ohms

**Speaker**—Dynamic

**Volume Control Range**—18 dB (typical)

## General:

**Compliance**—Registered to UL® 1459; FCC Part 68 registered; OSHA Part 1910 subpart S; CSA C22.2 No. 225-M90

**Weight**—1.09 oz. (30.9 g)

## 2. Introduction

### 2.1 About This Guide

This guide contains instructions for the 2-in-1 Headset. To derive maximum benefit from this versatile product, please take a few minutes to review this user's guide.

If after reviewing this guide you have any questions concerning the 2-in 1 Headset, please call Black Box Technical Support at 724-746-5500.

### 2.2 2-in-1 Headset Components

1. Noise Canceling Microphone
2. Flexible Microphone Boom Arm
3. Receiver

4. Adjustable Lobe Hinge™
5. Ear Capsule
6. Flexible Wire Headband
7. Ear Cushion (for Headband Wearing)
8. Foam Windscreen
9. Clothing Clip
10. Quick Disconnect

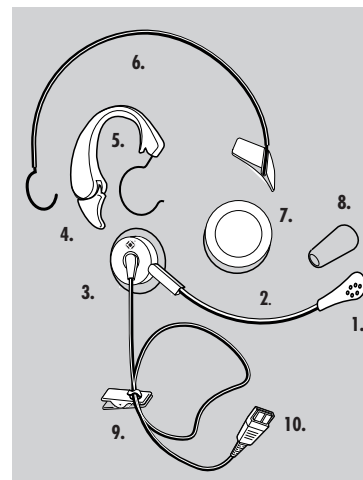


Figure 2-1. Components.

## 3. Ear Capsule

The 2-in-1 Headset comes out of the box with the ear capsule installed ready to be worn on the right ear (see Figure 3-1). It features an Adjustable Lobe Hinge for a custom fit. To change to the left ear, see **Section 3.2**.

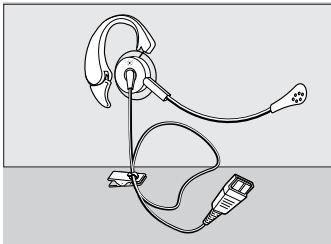


Figure 3-1. 2-in-1 Headset Ear Capsule.

### 3.1 Wearing the Ear Capsule

To put on your new 2-in-1 Headset ear capsule (see Figure 3-2):

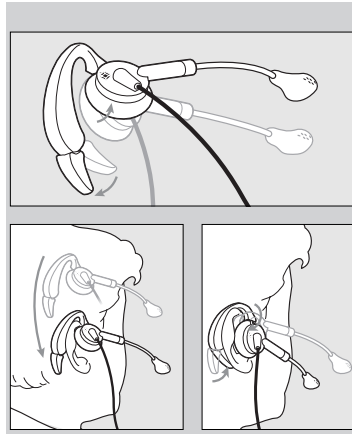


Figure 3-2. Wearing the Ear Capsule.

1. Straighten out the Adjustable Lobe Hinge.
2. Swing the ear capsule away from the receiver and slide the ear capsule behind your ear until the saddle of the hook rests on the uppermost part of your ear.

3. With your thumb, close the ear lobe hinge until it is snug, secure and comfortable to wear, but not tight on your ear.
4. Lightly press the speaker against the ear for proper positioning.

To remove, simply lift the 2-in-1 Headset off your ear.

### 3.2 Changing Ears

1. Hold the receiver assembly in your left hand with the microphone boom perpendicular to the floor.
2. With your right hand, flip the ear capsule down (see Figure 3-3).

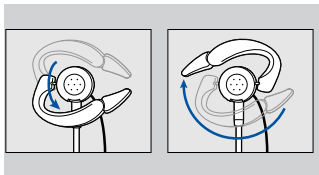


Figure 3-3. Changing Ears.

3. Rotate 180° clockwise if you are going from right ear to left ear, counterclockwise if you are going from left ear to right ear.

### 3.3 Removal

1. Remove the ear cushion.
2. In the right-ear wearing style with the speaker facing you, hold the headset in your left hand between your thumb and index finger.
3. With your right thumb and index finger, firmly grasp the top of the ear capsule at the saddle (see Figure 3-4).

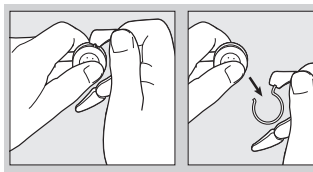


Figure 3-4. Removing Ear Capsule.

4. Pull down and out with your right hand, releasing the C-ring from the receiver housing.

### 3.4 Installation

1. Remove the headband.
2. With the speaker side of the receiver facing you hold the headset in your left hand between your thumb and index finger.
3. With your right hand, hold the ear capsule so that the C-ring opening is facing the receiver.

4. Push the C-ring onto the receiver housing until it springs into place in the groove (see Figure 3-5).

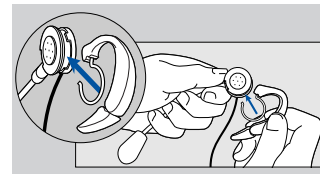


Figure 3-5. Installing Ear Capsule.

## 4. Headband

The 2-in-1 Headset can also be equipped with a lightweight flexible headband.

### 4.1 Installation

1. Remove the ear capsule.
2. With the corded side of the receiver facing you, hold the headset in your left hand between your thumb and index finger with the boom pointing to the right.
3. With your right hand, hold the headband so that the C-ring opening is facing towards the receiver (see Figure 4-1).

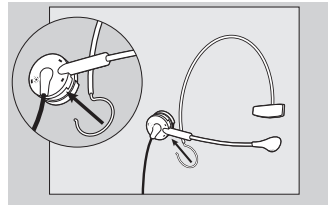


Figure 4-1. Installing Headband.

4. Push the C-ring of the headband onto the receiver housing until it springs into place in the groove.
5. Snap the large cushion onto the speaker housing until it clicks into place.

### 4.2 Removal

1. Remove the ear cushion.
2. In the left ear wearing style, with the corded side of the receiver facing you, hold the headset in your left hand between your thumb and index finger with the boom

pointing to the left.

3. With your right hand, hold the headband between your thumb and index finger.
4. Pull up on the receiver and push down on the headband until the C-ring snaps off of the receiver housing (see Figure 4-2).

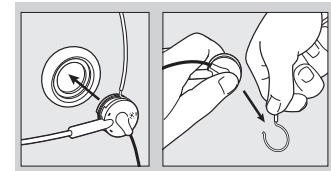


Figure 4-2. Removing Headband.

### 4.3 Changing Ears

To change to the other ear, rotate the entire speaker housing under the headband 180° (see Figure 4-3).

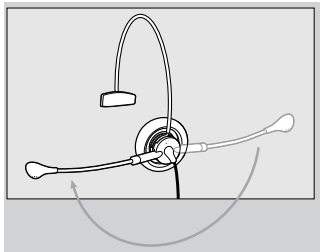


Figure 4-3. Changing Ears.

### 4.4 Headband Wearing

Position the headset lightly on your head (see Figure 4-4). The 2-in-1 Headset headband is extremely lightweight, ensuring a comfortable fit that lasts all day. The stabilizer cushion rests just above the ear on the side of your head opposite the receiver.



Figure 4-4. Headband Wearing.

Refer to the *Microphone Positioning* section (Chapter 5) for additional information.

## 5. Microphone Positioning

To take advantage of the noise-canceling qualities of the microphone, position the 2-in-1 Headset with the flat side of the microphone, marked with an F, facing you. The microphone boom should be adjusted so that the microphone is approximately one finger width away from your lower lip (see Figure 5-1).

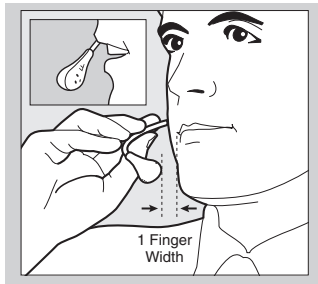


Figure 5-1. Microphone Positioning.

The 2-in-1 Headset has a flexible boom that can be reshaped until the microphone is correctly positioned in front of your mouth. One hand should grasp and steady the receiver end of the boom. The other hand can then flex the boom (see Figure 5-2).

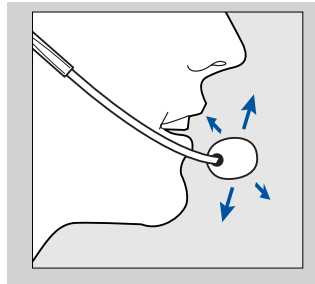


Figure 5-2. Flexing the Boom.

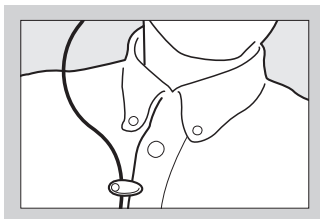
### CAUTION:

Never forcefully rotate the microphone boom past its stop point in the receiver assembly!



## 6. Clothing Clip

The clothing clip should be fastened for comfortable wearing (see Figure 6-1).



**Figure 6-1. Clothing Clip.**

It is designed to prevent the weight of the cord from dislodging the headset. Position the clip conveniently on your clothing. To reduce excess slack, reposition the clip by sliding it up and down the cord.

## 7. Connecting to Your Telephone

An amplifier is needed to connect the headset to the telephone or telephone system. The headset is equipped with a Quick Disconnect which mates to a Quick Disconnect jack on the amplifier. Follow the instructions supplied with the amplifier to connect the headset and amplifier to your telephone or telephone system (see Figure 7-1).

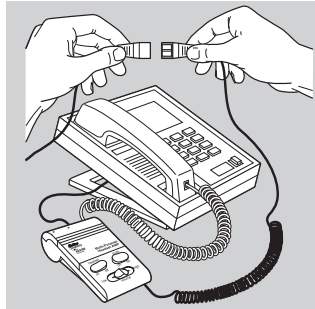


Figure 7-1. Amplified Configuration.

Disconnecting at the Quick Disconnect allows you to move around without having to remove

your headset. If you are on a call, disconnecting at the Quick Disconnect effectively puts the other party on hold until you return.

## 8. Maintenance

The foam covers on the receiver and microphone can be washed in mild soap and water. Replacement covers are available from Black Box. Call 724-746-5500 for details.

### Cautionary Notes to Computer Users

When using any headset with a computer, care should be taken in dry or low-humidity environments to protect the user from electrostatic discharge from the monitor (CRT). Computer monitors can induce a substantial electrostatic charge when turned on or off, or when there is a power failure, and the resulting electrostatic discharge can be passed through the headset to ground.

A user in close proximity to or touching the computer may feel a common “shock” sensation, similar to touching a doorknob after walking across a carpet, causing no harm to the user. This discharge is entirely due to the computer monitor; the headset is merely the shortest path to ground.

To minimize the possibility of electrostatic discharge through the headset, you can:

- Use a grounded screen in front of the monitor.
- Use static-dissipative wrist straps.
- Increase the relative humidity in the room to 60% or more.

- Install static-dissipative carpets or floor coverings (anti-static sprays can be helpful).
- Remove the headset before turning the computer on or off.

The 2-in-1 Headsets meet all OSHA, UL, FCC and CSA standards.

## 9. Troubleshooting

### 9.1 Calling Black Box

If you determine that your 2-in-1 Headset is malfunctioning, do not attempt to alter or repair the unit. It contains no user-serviceable parts. Contact Black Box at 724-746-5500.

Before you do, make a record of the history of the problem. We will be able to provide more efficient and accurate assistance if you have a complete description, including:

- the nature and duration of the problem.
- when the problem occurs.
- the components involved in the problem.

- any particular application that, when used, appears to create the problem or make it worse.

### 9.2 Shipping and Packaging

If you need to transport or ship your 2-in-1 Headset:

- Package it carefully. We recommend that you use the original container.
- If you are shipping the 2-in-1 Headset for repair, make sure you include everything that came in the original package. Before you ship, contact Black Box to get a Return Materials Authorization (RMA) number.



#### CUSTOMER SUPPORT INFORMATION

Order **toll-free** in the U.S.: Call **877-877-BBOX** (outside U.S. call **724-746-5500**)

FREE technical support 24 hours a day, 7 days a week: Call **724-746-5500** or fax **724-746-0746**

Mailing address: **Black Box Corporation**, 1000 Park Drive, Lawrence, PA 15055-1018

Web site: [www.blackbox.com](http://www.blackbox.com) • E-mail: [info@blackbox.com](mailto:info@blackbox.com)

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