

Desktop
Telephony
from  **BLACK BOX**



Multi-Purpose Amplifier

HS100A

Two-Prong Carbon Amplifier

HS101A

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

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Black Box® is a registered trademark of Black Box Corporation.

Northern Telecom® is a registered trademark of Nortel Networks.

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Toshiba® is a registered trademark of Toshiba Corporation.

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1. Introduction

The Amplifiers for BLACK BOX® headsets operate as an interface between your telephone and headset. Two models are available:

- Multi-Purpose Amplifier
- Two-Prong Carbon Amplifier

The Multi-Purpose Amplifier works with phones that have modular handset connectors. The Two-Prong Carbon Amplifier works with phones that have two-prong headset ports.

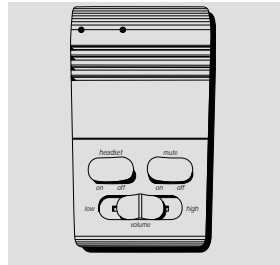


Figure 1-1. Multi-Purpose Amplifier.

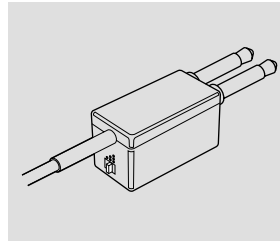


Figure 1-2. Two-Prong Carbon Amplifier.

2. Installation

2.1 Multi-Purpose Amplifier

Connect all the cords for the telephone and headset as shown in Figure 2-1.

1. Handset cord
2. Headset cord
3. Short telephone cord
4. Quick Disconnect
5. Headset stand

NOTE

The Multi-Purpose Amplifier works with phones that have modular handset connectors. The Two-Prong Carbon Amplifier works with phones that have two-prong headset ports.

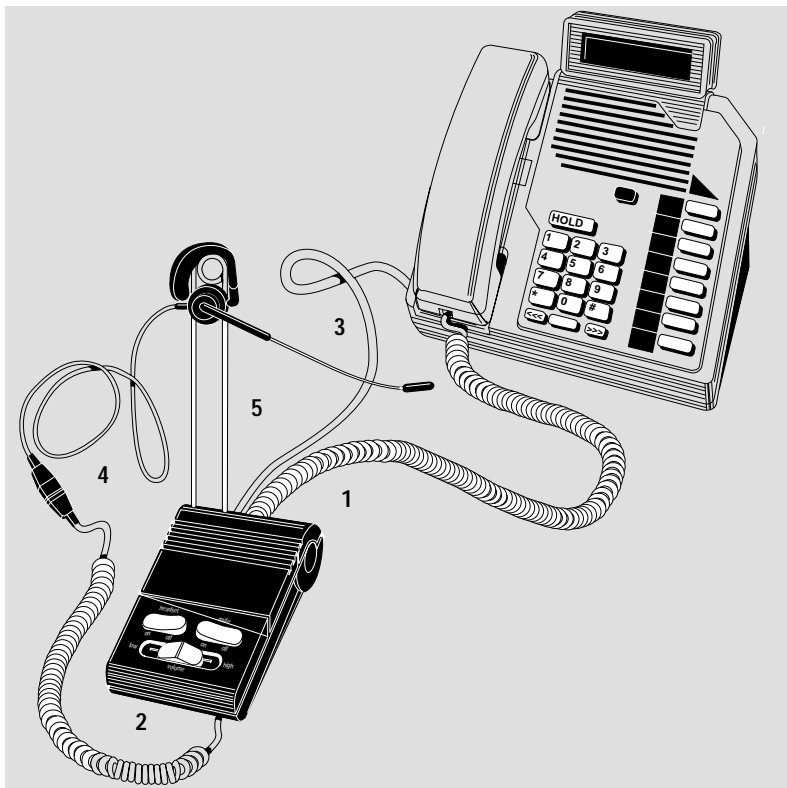


Figure 2-1. Installing the Multi-Purpose Amplifier.

2.2 Two-Prong Amplifier

Connect the Two-Prong Amplifier as shown in Figure 2-2.

1. Two-Prong Amplifier
2. Headset cord
3. Quick Disconnect
4. Telephone

NOTE

The Multi-Purpose Amplifier works with phones that have modular handset connectors. The Two-Prong Carbon Amplifier works with phones that have two-prong headset ports.

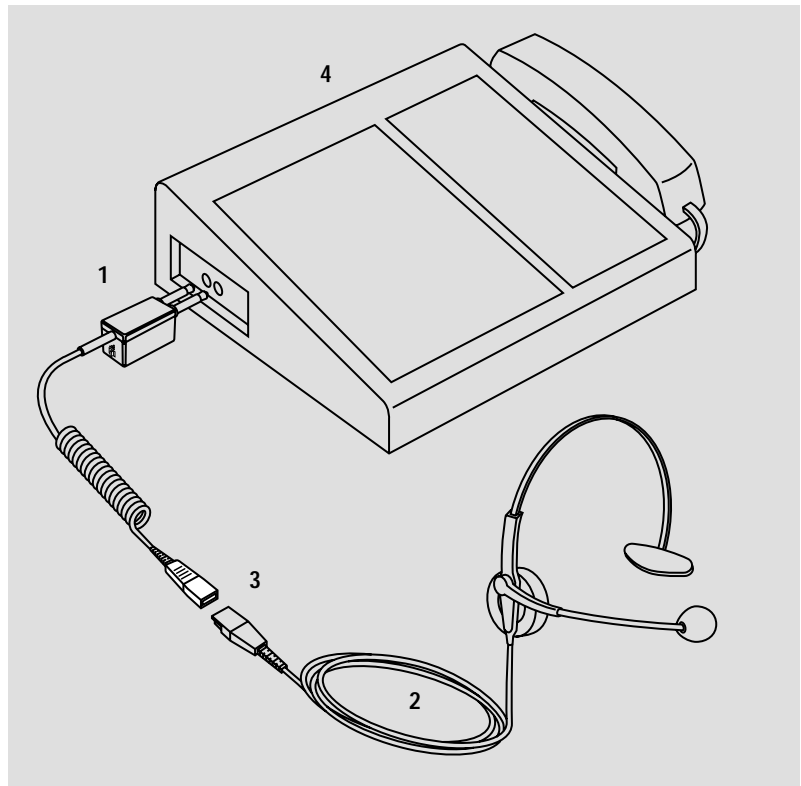


Figure 2-2. Installing the Two-Prong Amplifier.

3. How to Make a Call

3.1 Multi-Purpose Amplifier

After you've installed your Amplifier, follow these instructions. (They are general for all telephone systems.)

1. Put on your headset.
2. Press the headset switch on.

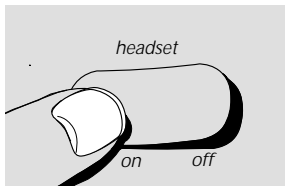


Figure 3-1. Headset Switch.

3. Take your telephone off the hook and make a call.
4. Make sure the mute switch is off. If you want to

disconnect the microphone, make sure the mute switch is on.

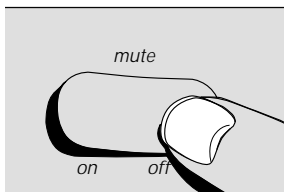


Figure 3-2. Mute Switch.

5. Adjust the volume control to a suitable level. If your telephone has a volume control setting, please set it to the mid- to low-end of the range for the best performance.

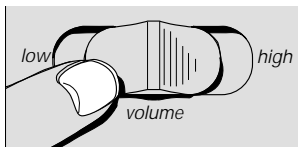


Figure 3-3. Volume Control on the Multi-Purpose Amplifier.

3.2 Two-Prong Amplifier

The Two-Prong Amplifier, designed for telephone systems equipped with a two-prong headset port, offers standard gain. Its 3-position volume control locks your volume preference into place. The Amplifier also features an 18" coiled cable with a Quick Disconnect connector.

To place a call with the Two-Prong Amplifier, follow these steps.

1. Put on your headset.
2. Take your telephone off the hook and make a call.
3. Adjust the volume control to a suitable level. If your telephone has a volume control setting, please set it to the mid- to low-end of the range for the best performance.

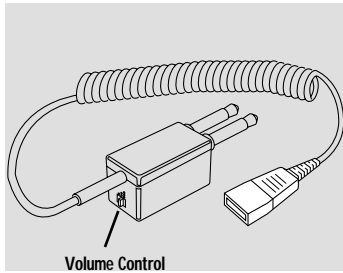


Figure 3-4. Volume Control on the Two-Prong Amplifier.

NOTE

If you're using the adapter in the battery mode, low batteries are indicated by a beeping noise in the headset.

4. Telephone Compatibility and Setup

process 1. If your telephone is not listed in Table 4-1, follow setup process 2.

Refer to Table 4-1 for the correct telephone switch setting for your telephone and follow setup

Table 4-1. Telephone Compatibility

Telephone Manufacturer	Telephone System	Station Telephone Model	Telephone Type Switch	Transmit Control	Require Batteries?
AT&T®	System 75/85, G1, G2, G3	7100, 7300, and 7400 Series	A	*1-10	NO
AT&T	Merlin®	BTN, BIS, and 7000 Series			
AT&T	5ESS ISDN	6500 and 7500 Series			
AT&T	1A2	2500, 2564, and 2565 Series	C	1	NO
Executone	Encore	All Sets			
ITT/Alcatel	501, 601	2500 and 2800 Series			
Panasonic®	DBS 40, 72, 96	VB-4300 Series			
Toshiba®	Strata SE and DK	EKT 2101-3102, EKT 6010-6025 in Headset Port			
Rolm	ETS Series		C	10	NO

*Transmit settings vary. Set to a satisfactory level for your telephone while making a call.

Table 4-1 (continued). Telephone Compatibility

Telephone Manufacturer	Telephone System	Station Telephone Model	Telephone Type Switch	Transmit Control	Require Batteries?
AT&T	Merlin Legend	MLX Series	E	*1-10	YES
AT&T	Consumer Products	Traditional 100 and 1000 Series			
AT&T	Consumer Products	FeaturePhone 400 1300 and 1600 Series			
Comdial	Executech	3500 and 6000 Series			
Mitel	SX 100, 200, and 2000	Superset 3, 4, and 7			
NEC	Electra	DTerm 4 and 5			
Northern Telecom®	Unity	All Sets			
Northern Telecom	Meridian	M2000 Series			
Northern Telecom	DMS 100	M5000 Series			
Northern Telecom	Meridian Norstar	M7000 Series			
Panasonic	Key System	KX-T Series			
Rolm	CBX and ACD Systems	Rolmphone 120, 240, and 400			

*Transmit settings vary. Set to a satisfactory level for your telephone while making a call.

4.1 Setup Process 1

If your phone system appears in Table 4-1, follow these steps to set up your amplifier. You will not be able to achieve compatibility without first following all of the setup instructions.

1. Remove the lid for the battery compartment by sliding it to the left and then lifting it off. See Figure 4-1.

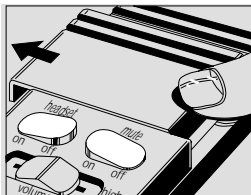


Figure 4-1. Removing the Lid.

2. Adjust the telephone type switch according to Table 4-1.

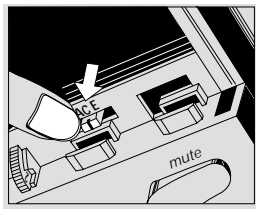


Figure 4-2. Adjusting the Telephone Type Switch.

3. If batteries are required according to Table 4-1, insert two AA batteries as indicated on the bottom of the battery compartment. See Figure 4-3.

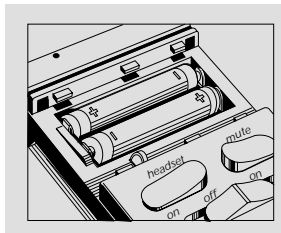


Figure 4-3. Inserting the Batteries.

4. Make a call and adjust the transmit control according to the level indicated in Table 4-1 or to a satisfactory level. See Figure 4-4.

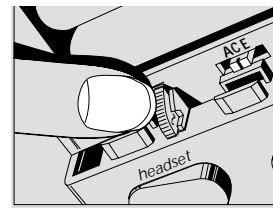


Figure 4-4. Adjusting the Transmit Control.

5. To replace the battery lid, align it at the right-hand side of the battery compartment and press down. Then slide it to the right. See Figure 4-5.

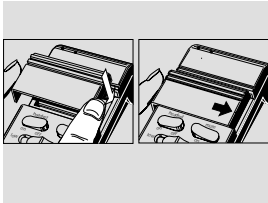


Figure 4-5. Replacing the Battery Lid.

4.2 Setup Process 2

If your telephone system does not appear in Table 4-1, follow this process. You will not be able to achieve compatibility without completing all the points included in Chapter 3, How to Make a Call.

1. Remove the lid for the battery compartment by sliding it to the left and then lifting it off.

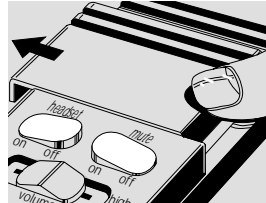


Figure 4-6. Removing the Lid.

2. Make sure that the telephone type switch is in position C.

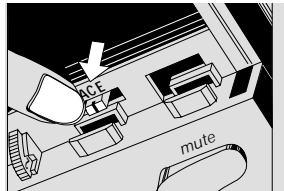


Figure 4-7. Adjusting the Telephone Type Switch to Position C.

3. Take the phone off the hook and make a call. If you do not get a dial tone, go to setup process 2a on the next

page. If you achieve a connection, adjust the transmit control to either position 1 or 10. (The middle settings of the transmit wheel have little effect in telephone type C setting. Setting 1 or 10 will give the best results.)

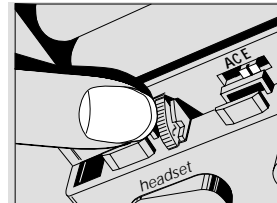


Figure 4-8. Adjusting the Transmit Control.

4. To replace the battery lid, align it at the right hand side of the battery compartment and press down. Then slide it to the right.

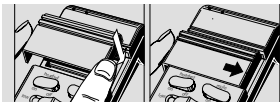


Figure 4-9. Replacing the Battery Lid.

SETUP PROCESS 2A

1. Adjust the telephone type switch to position E.

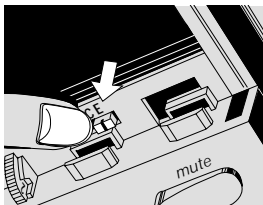


Figure 4-10. Adjusting the Telephone Type Switch to Position E.

2. Insert the two AA batteries as indicated on the bottom of the battery compartment.

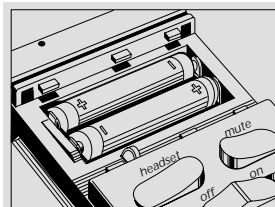


Figure 4-10. Inserting the Batteries.

3. Make a call and adjust the transmit control to a satisfactory level. If you still do not hear a dial tone, recheck connections and try the setup again.

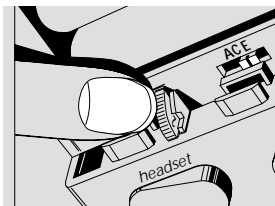


Figure 4-11. Adjusting the Transmit Control.

4. To replace the battery lid, align it at the right hand side of the battery compartment and press down. Then slide it to the right.

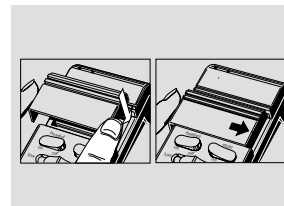


Figure 4-12. Replacing the Battery Lid.

5. Optional Accessories

5.1 On-line Indicator

The on-line indicator lights up when the headset is in use to indicate to co-workers that you are on the telephone. You can adjust it so the light can be seen from the direction you prefer.

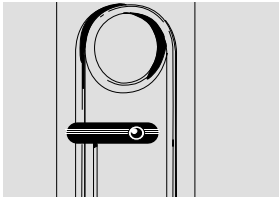


Figure 5-1. On-line Indicator.

5.2 AC Power Adapter

Remove the batteries when using an AC power adapter. The AC adapter port is indicated by the arrow in Figure 5-2.

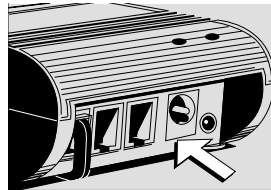


Figure 5-2. AC Power Adapter.

6. Troubleshooting

6.1 Calling Black Box

If you determine that your Amplifier 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.

6.2 Shipping and Packaging

If you need to transport or ship your Amplifier:

- Package it carefully. We recommend that you use the original container.
- If you are shipping the Amplifier 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

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54-0156A
June 2000
Printed in USA