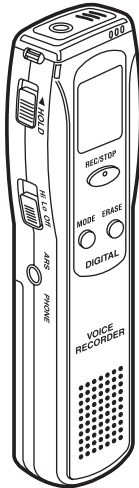




Digital Voice Recorder



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 • E-mail: info@blackbox.com

FEDERAL COMMUNICATIONS COMMISSION (FCC) AND INDUSTRY CANADA (IC) RADIO-FREQUENCY INTERFERENCE STATEMENTS

Class B Digital Device. This equipment has been tested and found to comply with the limits for a Class B computing device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular 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. If this equipment does cause harmful interference to radio or telephone reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one 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 an experienced radio/TV technician for help.

Caution:

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

To meet FCC requirements, shielded cables and power cords are required to connect this device to a personal computer or other Class B certified device.

DIGITAL VOICE RECORDER

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.

EUROPEAN UNION DECLARATION OF CONFORMITY

This equipment has been tested and found to comply with the requirements of the European EMC directive 89/336/EEC.



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Microsoft and IntelliMouse are registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

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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.

DIGITAL VOICE RECORDER

10. El equipo eléctrico debe 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.

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1. Specifications

- Compliance:** CE; FCC Part 15 Subpart J Class B, IC Class/ classe B;
- Microphone:** Type: Built-in mono audio omnidirectional electrical condenser;
Sensitivity: -45 dB
- Other Interfaces:** 3.5-mm mini mono audio input (from external microphone) requires impedance below 3 kilohms;
3.5-mm mini mono audio output (to earphones, etc.) requires impedance above 8 ohms (we recommend 32 ohms)
- Maximum Power Output:** 5 mW to earphone, 80 mW to speaker; at speaker impedance of 8 ohms, yields 10% total harmonic distortion
- Frequency Bandwidth:** 500 to 3200 Hz
- Memory:** Internal flash type
- Recording Time:** 4 hours and 18 minutes in SP (slow play) mode, 9 hours and 22 minutes in LP (long play) mode

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Max. No. of Recorded Messages:	396 (99 in each of four files)
User Controls:	(3) Front-mounted pushbuttons: Record/stop, erase, mode/pause; (2) Left-side mounted slide switches: HOLD, ARS (Automatic Recording System); (3) Right-side-mounted: PLAY/STOP pushdial (with FF and REWIND); FILE button; Volume dial
Indicators:	Front-mounted LCD; (1) Recording LED on front-mounted REC/STOP button
Connectors:	(2) 3.5-mm mini mono audio jacks: (1) Top-mounted for input, (1) Left-side-mounted for output
Speaker Diameter:	23 mm (0.9")
Temperature Tolerance:	32 to 104°F (0 to 40°C)
Humidity Tolerance:	Operating: Up to 60% noncondensing; Storage: Up to 90% noncondensing

Power:	From two included alkaline AAA batteries: Input: 3 VDC; Battery life: Approx. 10 hours of recording; Approx. 8 hours of earphone playback at volume 5; Approx. 6.5 hours of speaker playback at volume 5
Size:	4.2"H x 1"W x 0.6"D (10.7 x 2.5 x 1.5 cm)
Weight:	Without batteries: 1.2 oz. (34 g); With batteries: 1.9 oz. (54 g)

2. Introduction

2.1 Features and Benefits

The Digital Voice Recorder is a portable recording device that you can use to record voice messages or conversations in digital format for later playback or for archiving or editing on a personal computer. It's small, light, and ultra slim, but has a wide range of other powerful features:

- Sensitive built-in omnidirectional microphone.
- Can store up to 99 messages in each of four different files, for a total storage capacity of 396 messages.
- Automatic Recording System (ARS) that, if enabled, can automatically turn off the Recorder during periods of silence, in order to make the most of your recording time.
- HOLD switch prevents unintended operation.
- You can select the recording mode—slow play (SP) for better sound quality or long play (LP) for more recording time.

- You can pause recording and playback. Playback can also be set to repeat indefinitely.
- Informs you of estimated remaining recording time.
- Batteries are included.
- Battery indicator displays remaining charge.
- To preserve the batteries, it turns itself off if it's left on for a full minute without being operated.
- You can search for individual messages.
- Input and output jacks allow recording from and playback to external devices, such as the included microphone and earphone.
- Included Jet Voice Mail software for message handling on an IBM® compatible PC.
- Easily carried with included wrist strap.

2.2 The Complete Package

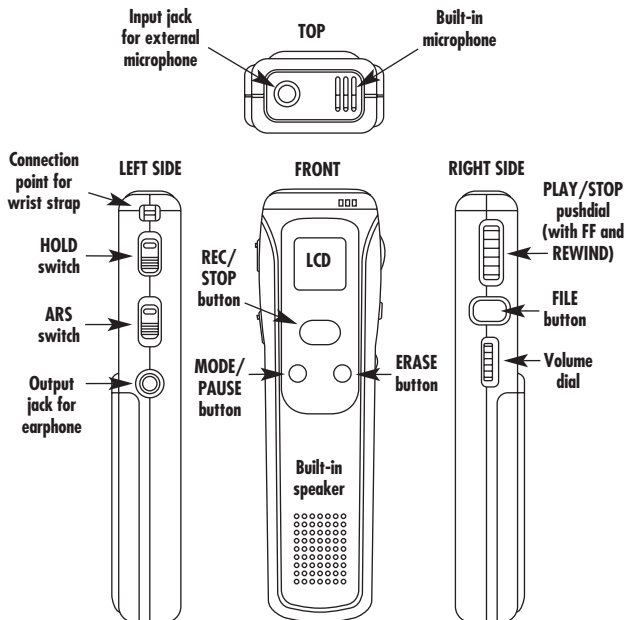
You should have received all of the following with your Digital Voice Recorder:

- (2) Alkaline AAA batteries.
- Earphone.
- External microphone.
- Telephone adapter.
- Phone cable.
- LINE IN/LINE OUT audio cable.
- Wrist strap.
- Mini CD-ROM with IBM PC and Microsoft® Windows® compatible Jet Voice Mail software.
- This manual.

If anything is missing or damaged, call Black Box. Also notify the shipping carrier if any damage appears to have occurred during shipping.

2.3 The Recorder Illustrated

Figure 2-1 shows the top, front, and sides of the Digital Voice Recorder, and identifies the Recorder's connectors, indicators, and controls.



2.4 Safety Considerations

Here are some things you need to know before you use the Digital Voice Recorder:

- Do not place or use the Recorder in or near any location where the temperature might rise above 104°F (40°C), including but not limited to:
 - Open flame;
 - Furnaces and heat registers; and
 - Non-ventilated areas in direct sunlight, including closed vehicles.
- Do not place or use the Recorder in or near water or any location where relative humidity might rise above 60%, including but not limited to bathrooms and swimming pools.
- Do not place or use the Recorder in any dusty area, including but not limited to construction and industrial sites.
- Try not to drop the Recorder or expose it to violent impacts or vibrations.
- Do not press on the Recorder's LCD or allow anything to rest on top of it.

- Do not use the Recorder while walking or while operating a car or other machinery.
- The Recorder contains magnetic parts, so do not place or use it near credit or debit cards, room-key or security cards, airline tickets, computer diskettes, and other items that carry magnetically encoded information.
- Do not use the Recorder in any location in which operating electronic devices or components is prohibited.
- Never open, disassemble, or attempt to repair the Recorder.

The manufacturer and its authorized agents will not be liable for any damages caused by the misuse of this product, nor for any claims by any third party.

The manufacturer and its authorized agents will not be liable for any lost messages caused by malfunction, misuse, or any other reason.

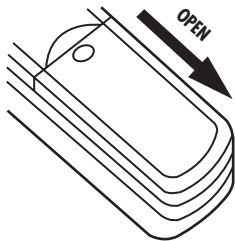
3. Installing or Replacing Batteries

CAUTION!

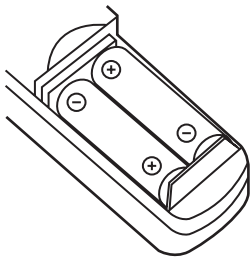
Make sure that the Recorder is set to STOP (not recording or playing back anything) when you do this. Otherwise, you could erase previously recorded messages and degrade the Recorder's performance.

To install the included AAA batteries in your Digital Voice Recorder, or to replace them with new batteries when the original ones fail, take these steps:

1. Open the battery cover on the unit's rear panel.



2. Load two batteries in the compartment, matching the positive and negative terminals of the batteries to the Recorder's terminals as marked in the compartment. Be sure to use alkaline batteries. Do not use batteries of two different types together.



3. Close the battery cover.

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4. Press the Recorder's PLAY/STOP pushdial or its REC/STOP button to check the remaining battery capacity. The Recorder's LCD should show one of these indications:

Full charge



Half charge



Low charge



No charge



If the LCD doesn't light after you install fresh batteries in the Recorder, check the positive/negative polarities of the batteries again and make sure they're correct. If the polarities are correct but the LCD still doesn't light, the Recorder is probably broken or defective; remove the batteries and call Black Box Technical Support.

Batteries should last for approximately 10 hours of total recording time, or 8 hours of total earphone-playback time at volume 5, or 6.5 hours of total speaker-playback time at volume 5. To preserve the batteries, take them out of the Recorder if you won't be using it for an extended period of time.

4. Recording

This chapter assumes that you'll be using the Digital Voice Recorder's built-in condenser microphone. If you want to record with the included external microphone, plug it into the microphone jack on top of the Recorder. If you want to record to or from some other external device, see **Chapter 7** for the additional instructions for attaching these devices and recording with them.

As you use this chapter, refer to Figure 2-1 in **Section 2.3** to see where the Recorder's controls, connectors, and indicators are.

4.1 Basic Recording

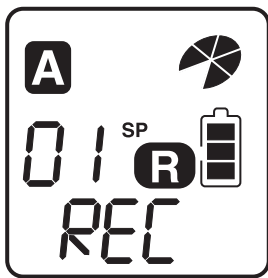
To record voice messages with the Digital Voice Recorder, take these steps, referring to Figure 2-1 in **Section 2.3** to see where the Recorder's components are:

CAUTION!

Before attempting to record anything important, make several sample recordings to familiarize yourself with how the Recorder works.

1. Set the HOLD switch on the Recorder's left side to the OFF position (down), then press the REC/STOP button on the front of the Recorder to turn the Recorder ON.
2. Referring to the Recorder's LCD, press the FILE button on the Recorder's right side as many times as necessary to select which of the Recorder's four files ("A," "B," "C," or "D") you want to record the message in. (If, while you are recording, the Recorder indicates that the selected file is full, you'll need to use a different file or erase some of the messages in the current file. For instructions on erasing messages, see **Chapter 6**.)

- Point the microphone toward the sound source and press and hold REC/STOP until recording starts: The message number, the oval “R” recording symbol, and the abbreviation “REC” will appear on the LCD alongside the symbols that were already there (including the file letter, the “SP”/“LP” recording mode, and the battery-life gauge); the “pie slice” operating symbol in the upper right will begin to rotate; and the red LED on the REC/STOP button will light. (The message number is assigned automatically; it will always be “1” [appearing as “01”] for the first recorded message in a file, or the number following that of the previously recorded message in the chosen file.) Two seconds into the recording, “REC” will be replaced by a display of the message’s elapsed recording time in minutes and seconds.



4. When you've finished recording, press REC/STOP again.

If no other buttons are pressed for one minute after you stop recording, the Recorder will shut itself OFF automatically.

If your batteries ever become fully discharged while you are recording, the “BATT” symbol on the LCD will begin blinking to warn you, and then the Recorder will automatically shut itself OFF. You can resume recording as soon as you replace the batteries. Do *not* remove the Recorder's batteries while recording is in progress—you could erase previously recorded messages and degrade the Recorder's performance. Make sure the Recorder is set to STOP (not recording or playing back anything) when you remove or replace batteries.

4.2 Selecting the Recording Mode

The default recording-mode selection for the Digital Voice Recorder is SP (slow play). In SP mode, the Recorder can record high-quality sound for up to 4 hours and 18 minutes. If you need it to record for a longer time and sound quality isn't as important, you can press the MODE/PAUSE button (labeled "MODE") on the front of the Recorder to set it to LP (long play) mode, in which it can record for up to 9 hours and 22 minutes. Depending on this setting, either "SP" or "LP" will appear in the Recorder's LCD.

You can only change the recording mode when the Recorder is set to STOP (not actively recording or playing back anything). Once recording starts, it's not possible to change the recording mode; instead, pressing the MODE/PAUSE button will pause the recording, as described in **Section 4.3.1**.

4.3 Other Recording Functions

4.3.1 PAUSING

While the Digital Voice Recorder is recording, you can pause the recording by pressing the MODE/PAUSE button on the front of the Recorder. The word “PAUSE” will begin to flash in the Recorder’s LCD to indicate that the recording is paused. (The red LED on the REC/STOP button will also begin flashing.) To resume recording, press MODE/PAUSE again or press the REC/STOP button. (If you press MODE/PAUSE when the Recorder is *not* recording, you will change the recording mode, as described in **Section 4.2**.)

4.3.2 AUTOMATIC RECORDING (USING THE ARS)

In its factory-default setting, the Digital Voice Recorder records continuously until it is paused or stopped. If you'd rather, you can set the Recorder to record only when it detects a voice or other prominent sound, in order to preserve your batteries and maximize your recording time. To do this, turn on the Recorder's Automatic Recording System (ARS) by moving the switch labeled "ARS" on the left side of the Recorder from the bottom "Off" position to either the middle "Lo" position (if you are in an area with a lot of background noise) or the top "Hi" position (if you are in a quiet area). Move the ARS switch back to the "Off" position to turn ARS off.

When you record with ARS on, recording will proceed while there is prominent sound to record. "V-" will appear on the LCD to the left of the "R" recording symbol. But whenever the Recorder stops detecting sound, it stops recording, and replaces the display of the elapsed recording time on the LCD with the letters "ARS."

4.3.3 DISPLAYING THE REMAINING RECORDING TIME

To see how much recording time is left, press the FILE button on the right side of the Digital Voice Recorder while the recording is in progress. The letters “RE” and a readout of the remaining time in minutes and seconds will appear on the Recorder’s LCD. (If you press the FILE button while recording is not in progress, you will switch between the four files in which recordings are stored, as described in **Section 4.1.**)



4.3.4 MONITORING THE RECORDING

If you want to listen to how a recording sounds as you're recording it, you can plug the included earphone into the earphone jack on the left side of the Digital Voice Recorder. The sound that you hear from the earphone will be what the recording will sound like when it's played back. Unfortunately, while it's possible to adjust the volume of what you hear in the earphone during the recording, this will have no effect on the volume of the actual recording. Recording volume can't be adjusted when the earphone is plugged in.

5. Playback

This chapter assumes that you'll be using the Digital Voice Recorder's built-in speaker. If you want to play back through an external device, see **Chapter 7** for the additional instructions for attaching these devices and playing back through them.

As you use this chapter, refer to Figure 2-1 in **Section 2.3** to see where the Recorder's controls, connectors, and indicators are.

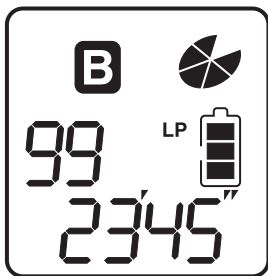
5.1 Basic Playback

To play back messages you've previously recorded with the Digital Voice Recorder, take these steps:

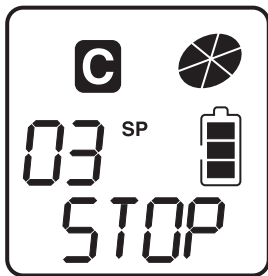
1. Move the HOLD switch to OFF (down), then press the PLAY/STOP pushdial on the Recorder's right side to turn on the Recorder.
2. Press the PLAY/STOP pushdial again and the Recorder will begin to continuously play back messages, displaying the message numbers as it does so. (If you don't select a particular message for playback as described in **Section 5.2.2**, playback will begin with the oldest recorded

DIGITAL VOICE RECORDER

message in the currently selected file.) The message number and the word “PLAY” will appear on the LCD, and the “pie slice” operating symbol in the upper right will begin to rotate. Two seconds into the playback, the word “PLAY” will be replaced by a display of the message’s elapsed playing time in minutes and seconds. To hear the playback, place the Recorder’s top-mounted speaker near your ear, or attach the included earphone and place the earphone in your ear if the location is noisy or you want privacy.



- When you're finished listening to your recorded messages, press **PLAY/STOP** or **REC/STOP** to stop playback. The number of the last message you played back will be displayed on the LCD.



If no other buttons are pressed for one minute after you stop playback, the Recorder will shut itself OFF automatically.

If your batteries ever become fully discharged while you are playing back messages, the “BATT” symbol on the LCD will begin blinking to warn you, and then the Recorder will automatically shut itself OFF. You can resume playback as soon as you replace the batteries.

Do *not* remove the Recorder's batteries while playback is in progress—you could erase previously recorded messages and degrade the Recorder's performance.

Make sure the Recorder is set to STOP (not recording or playing back anything) when you remove or replace batteries.

5.2 Other Playback Functions

Some of these functions involve the use of the Recorder's FAST FORWARD and REWIND positions of the PLAY/STOP pushdial on the Recorder's right side. These are labeled ">>" and "<<" respectively; activate them by turning and holding the pushdial toward those directions.

The functions described in **Sections 5.2.1** through **5.2.4** involve moving backward or forward in the message sequence contained in a single one of the Recorder's four message files. To reach a message contained in a different file, you'll need to use the Recorder's FILE button to switch between the files.

5.2.1 FAST FORWARDING AND REWINDING DURING PLAYBACK

If you want to skip rapidly through your recorded messages during playback, turn and hold the pushdial toward **FAST FORWARD** to move forward or toward **REWIND** to move backward. The message number and/or playing time displayed on the LCD will correspondingly increase or decrease. When you reach the desired point, release **FAST FORWARD** or **REWIND** to resume normal playback from that point. If you reach the end of the last message with **FAST FORWARD**, or the start of the first message with **REWIND**, the Recorder will “wrap” to the other end of the message file.

5.2.2 SEARCHING FOR A NUMBERED MESSAGE

To queue up a certain message before you begin playing any messages back, repeatedly turn and release the pushdial toward **FAST FORWARD** or **REWIND** while the Recorder is stopped (not recording or playing back anything). This will cause the Recorder to skip to the next or previous message in numeric sequence respectively; the message number displayed on the LCD will increase or decrease by one, but the Recorder won't play anything. When you reach your desired message, press **PLAY/STOP** to begin normal playback starting with that message.

5.2.3 SCAN-PLAYING

You might want to do this if you'll know a message when you hear it, but you don't remember what the number of the message is. Either while the Recorder is stopped (not recording or playing back anything) or during playback, if you press and hold the PLAY/STOP pushdial for more than 2 seconds, the Recorder will start to "scan play": skip to the next message in numeric sequence, play 10 seconds of it, skip to the message after that, play 10 seconds of it, and so on. (The word "SCAN" will appear on the LCD.) It will continue doing this until (a) it stops automatically after playing the first 10 seconds of the last recorded message, or (b) you stop it manually by pressing PLAY/STOP again, at which point it will begin or resume normal playback starting with the message that you stopped scan-play on.

5.2.4 SCAN-SEARCHING

To search through a large volume of messages, press and release **FAST FORWARD** or **REWIND** repeatedly during playback. This causes the Recorder to “scan-search” forward or backward through the messages: It plays 1-second message samples after skipping ahead or back by ever-increasing intervals: 5 seconds, then 10 seconds, then 20 seconds, and so on. The message number displayed on the Recorder’s LCD will increase or decrease as the search proceeds through the messages. When you stop pressing **FAST FORWARD** or **REWIND**, normal playback resumes from the point where the search stopped.

5.2.5 PAUSING DURING PLAYBACK

During playback, press the Recorder’s **MODE/PAUSE** button (labeled “**MODE**”) to pause the playback. The word “**PAUSE**” will begin to flash in the Recorder’s LCD to indicate that the playback is paused. Press **MODE/PAUSE** again, or press the **PLAY/STOP** pushdial, to resume normal playback.

5.2.6 REPEATING THE PLAYBACK OF A MESSAGE

Press the FILE button during playback and hold it for at least 2 seconds to make the Recorder indefinitely repeat the playback of the current message. (The LCD will begin alternately displaying the message number and the letters “RP”.) Press FILE again, or press the PLAY/STOP pushdial, to resume normal playback and move on to the next message.

6. Erasing

Be very careful as you work with the erase functions, even though they are only effective when the Digital Voice Recorder is stopped (not recording or playing back anything).

As you use this chapter, refer to Figure 2-1 in **Section 2.3** to see where the Recorder's controls, connectors, and indicators are.

6.1 Erasing a Message

To erase a particular message in the Digital Voice Recorder's memory, take these steps, watching the LCD carefully and making sure to start with the Recorder turned off:

1. Move the HOLD switch to OFF (down), then press the REC/STOP button to turn the Recorder on.
2. Press the FILE button as many times as necessary to select the message file containing the message you want to delete. Turn and release the PLAY/STOP pushdial toward FAST FORWARD (labeled ">>") or REWIND (labeled "<<") as many times as necessary to reach the individual numbered

message. At this point, you can confirm that you've selected the message you wanted to by pressing the PLAY/STOP pushdial and listening to a playback of the message; press PLAY/STOP again to end the playback.

3. Press and hold the ERASE button for more than one second. The word "ERASE" will begin to blink on the Recorder's LCD; the "pie slice" operating symbol in the upper right will begin to rotate; and the first three seconds of the message will be played. If you press ERASE again during this three-second interval to confirm your choice, that message will be deleted, and all messages that follow it will move up one numbered slot. (For example, if you delete message 14, message 15 will become message 14, 16 will become 15, and so on.) If you press any other button while "ERASE" is blinking, or if you don't press anything before the three-second interval expires, the erasure will be aborted and the message will remain in the same numbered slot in the Recorder's memory.

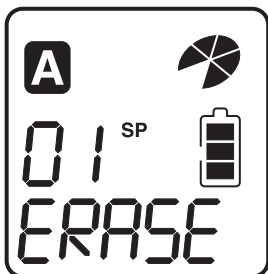
6.2 Erasing an Entire File

To erase an entire message file in the Digital Voice Recorder's memory, take these steps, watching the LCD carefully and making sure to start with the Recorder turned off:

1. Move the HOLD switch to OFF (down), then press the REC/STOP button to turn the Recorder on.
2. Press the FILE button as many times as necessary to select the message file ("A," "B," "C," or "D") that you want to delete.
3. Press and hold both the ERASE button and the FILE button for more than one second. The letter designation of the message file ("A," "B," "C," or "D") and the words "AL ERASE" ("all erase") will begin blinking on the LCD for three seconds. If you press ERASE again during this three-second interval to confirm your choice, that message file and all messages in it will be deleted. (Subsequent messages recorded in that file will be numbered starting with "1" again; this will be displayed as "01".) If you press any other button while "AL ERASE" is blinking, or if you don't press anything before the three-second interval expires, the erasure will be aborted and that file and all of

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its messages will remain in the Recorder's memory.



7. Using the Recorder with External Equipment

CAUTION!

As with basic self-contained recording (see **Chapter 4**), we recommend that before you attempt to record anything important to or from an external device, you make several sample recordings to familiarize yourself with how the Recorder and the device work together.

7.1 Recording from a Telephone

To record to the Digital Voice Recorder from a telephone, take these steps, referring to Figure 7-1 at the end of this section (also refer to the telephone's manual for information about how to operate it):

NOTE

Recording phone conversations without the knowledge and consent of all of the participants is illegal in many areas. Before recording a call with your Digital Voice Recorder, be sure that the parties involved are informed that the call is being recorded. If in doubt, consult legal counsel.

1. Turn off the Recorder.
2. Unplug the phone cable from the telephone's phone-line jack.

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3. Run the included 11.8" (30-cm) phone cord from the Recorder's included telephone adapter to the telephone's phone-line jack.
4. Run the included audio cable from the telephone adapter to the microphone jack on top of the Recorder.
5. Plug the phone cable that you disconnected in step 2 into the telephone adapter's phone-line jack.
6. Dial the phone number. As soon as the party you've called answers, press the REC/STOP button on the Recorder to turn the Recorder ON, then press REC/STOP again to begin recording. When you've finished, hang up and press REC/STOP once more to stop recording.

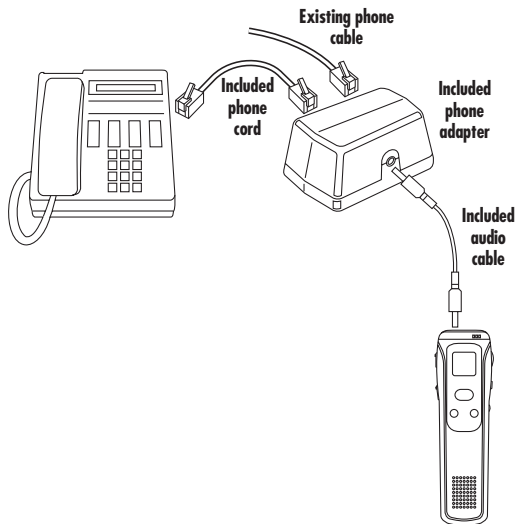


Figure 7-1. Connecting a telephone.

7.2 Recording from an External Electronic Audio Source

To record to the Digital Voice Recorder from an external audio source device such as a radio, CD player, home stereo system, etc., take these steps (refer to the device's own manual for information about its I/O ports and user controls and how to operate the device):

1. Turn off both the Recorder and the source device. Lower the volume on the source device down to its lowest setting, so that you don't get a distorted recording. (Depending on the source device, you might be able to increase its volume level above this, but you'll need to test to find the best level.)
2. Get an audio cable with a 3.5-mm mini mono audio plug on the Recorder end and an appropriate plug or adapter on the device end. (You can use the included audio cable if the source device also has a 3.5-mm jack.) Run this cable from the device's "auxiliary out" port to the external microphone jack on top of the Recorder, as shown in Figure 7-2 at the end of this section.

3. Set the volume on the source device to its medium setting. Set the Recorder's volume to 5. If the volume level of the recording isn't important, leave the Recorder's volume set to 5 for the duration of the recording. Otherwise, plug an earphone into the earphone jack on the Recorder's left side, put the earphone in your ear, and prepare to adjust the Recorder's volume as necessary. (Changing the volume setting of the source device should not have any effect on the volume level of the recording.)
4. Press the REC/STOP button on the front of the Recorder to turn on the Recorder. Turn on the source device and begin playing the audio. Press the Recorder's REC/STOP button again to begin recording this audio stream. Press the REC/STOP button one more time to stop recording.

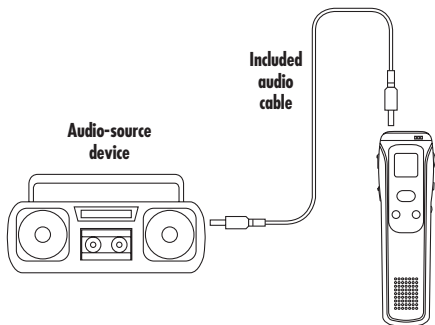


Figure 7-2. Connecting an external audio source.

7.3 Playing Back to an External Recorder

To play back from the Digital Voice Recorder to an external audio recording device such as a tape recorder or DAT recorder, take these steps (refer to the device's own manual for information about its I/O ports and user controls and how to operate the device):

1. Turn off both the Recorder and the external recording device.
2. Get an audio cable with a 3.5-mm mini audio plug on the Recorder end and an appropriate plug or adapter on the external-device end. (You can use the included audio cable if the source device also has a 3.5-mm jack.) Run this audio cable from the external device's "auxiliary in" or "microphone in" port to the earphone jack on the left side of the Recorder, as shown in Figure 7-3 on the next page.
3. Set the Recorder's volume to 5. Set the volume on the external recording device to its medium setting.

4. Press the **PLAY/STOP** pushdial on the right side of the Recorder to turn on the Recorder. Turn on the external recording device and begin recording with it (on most tape recorders, you will need to press **RECORD** and **PLAY** buttons simultaneously). As quickly as possible, press the Recorder's **PLAY/STOP** pushdial again to begin playing back the message to the external device. When you're finished, stop the external device, then stop the Recorder by pressing its **PLAY/STOP** pushdial once more.

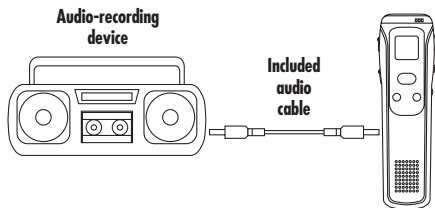


Figure 7-3. Connecting an external audio recording device.

7.4 Using the Recorder with a PC

The Digital Voice Recorder comes with a mini CD-ROM containing Jet Voice Mail software. With Jet Voice Mail, you'll be able to edit and record messages and send them to people using voice mail or email. To be able to run this software on a computer and use the computer with the Recorder, the computer will need to meet these requirements:

- **Hardware platform:** IBM® PC compatible with sound card and CD or DVD drive;
- **Processor:** Intel® 80486DX2 or better;
- **RAM:** At least 8 MB—we recommend 16 MB or more;
- **Operating system:** Windows 95/98/2000/Me or more recent;
- **Hard disk space:** At least 4 MB.

To connect the computer to the Recorder, run the included audio cable from the audio-input jack on the computer's sound card (sometimes labeled MICROPHONE IN or AUXILIARY IN) to the earphone jack on the Recorder's left side, as shown in Figure 7-4 on the next page.

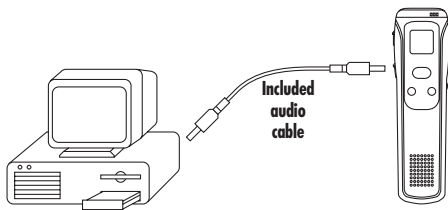


Figure 7-4. Connecting a PC's sound card.

To install the Jet Voice Mail software on the computer, take these steps:

1. Power up the computer and put the Jet Voice Mail CD-ROM in the computer's CD or DVD drive.
2. Double-click the "My Computer" icon on your desktop.
3. Double-click the icon for the CD or DVD drive.
4. Double-click the icon for "jvm20fe.exe" to run the launch the installation program for Jet Voice Mail.

5. A setup wizard will appear. After it starts running, click “Next” to continue, then press “Close” to exit the setup.
6. An icon for Jet Voice Mail will now appear on your screen.

Once Jet Voice Mail is installed, you can double-click on the Jet Voice Mail icon at any time to run the program. It has a menu bar of icons for various functions (recording, playback, voice mail, etc.), and you can click on “Help” in the menu bar for more detailed information about any function. If you have difficulty, refer to the troubleshooting information in **Section 9.1.2**.

8. Preventing Unintended Changes in Operation

If you have to handle or store the Digital Voice Recorder in conditions in which it will be likely that its buttons and other controls will be pressed accidentally—for example, if you have to keep it in a pocket or portable container, or carry it in a crowded trade show—it is probably a good idea to set it so that it can't be unintentionally interrupted or turned ON or OFF. To do this, move the HOLD switch on its left side from OFF (down) to ON (up, toward the arrowhead).

If you turn HOLD ON while the Recorder is OFF, it will not be able to be turned ON or operated until HOLD is set back to OFF. Pressing REC/STOP or PLAY/STOP will briefly cause the word “HOLD” and a display of the remaining battery charge to appear on the LCD, but otherwise the LCD will remain blank and none of the Recorder's normal functions will work.

If you turn HOLD ON while the Recorder is ON but stopped (not recording or playing back anything), it will not be able to be operated until HOLD is set back to OFF. Pressing any of the Recorder's buttons or moving

its PLAY/STOP pushdial will have no effect other than to briefly cause the word “HOLD” and a display of the remaining battery charge to appear on the LCD. If left alone, the Recorder will eventually turn itself OFF and will not be able to be turned back ON, as above.

If you turn HOLD ON while the Recorder is playing back a message, the playback will not be able to be interrupted until the last message in the file is played or HOLD is set back to OFF. Similarly, if you turn HOLD ON while the Recorder is recording, the recording will not be able to be interrupted until the Recorder runs out of memory space or HOLD is set back to OFF. Pressing any of the Recorder’s buttons or moving its PLAY/STOP pushdial will have no effect other than to briefly cause the word “HOLD” and a display of the remaining battery charge to appear on the LCD. Once the Recorder does reach the end of playback or runs out of memory for recording, it will remain in the stopped condition. If left alone, the Recorder will eventually turn itself OFF and will not be able to be turned back ON, as above.

9. Troubleshooting

9.1 Things to Try

Here are a few problems that some people have with the Digital Voice Recorder and some possible causes and solutions for them.

NOTE

In general, when the Recorder begins operating abnormally or its LCD starts looking strange, try replacing its batteries.

9.1.1 BASIC RECORDER PROBLEMS

The Recorder should be on, but its LCD is blank.

1. The batteries might be dead. Try replacing them.
2. The polarity of the batteries might be wrong. Make sure that the batteries are facing in the directions indicated in the battery compartment.

The Recorder won't record anything.

1. The HOLD switch might be set to ON. Move it to OFF.
2. All of the selected file's 99 numbered message slots might be used or its total file capacity might be full. Choose a different file or erase some messages.
3. The batteries might be dead. Try replacing them.

The Recorder won't play back a message.

1. The HOLD switch might be set to ON. Move it to OFF.
2. There might not be a message recorded in the slot you've selected. Check the message number.
3. The batteries might be dead. Try replacing them.

There's no sound coming out of the Recorder's speaker.

1. The volume might be set too low. Turn it up.
2. If you have an earphone connected to the Recorder's earphone jack, unplug it.

There's no sound coming out of the earphone plugged into the Recorder's earphone jack.

1. The volume might be set too low. Turn it up.
2. The earphone might not be plugged in correctly. Reseat the earphone plug.

9.1.2 PROBLEMS USING THE RECORDER WITH A PC

Here are some problems that can arise if you connect the Recorder to a PC and use it with the included Jet Voice Mail software as described in **Section 7.4**.

The software is installed, but the record/playback menu won't come up.

There's probably a problem with the sound card. Make sure the PC has a sound card, that the card is correctly seated and installed, and that the card is working properly.

There's no sound when recorded messages are played back.

1. You must have an audio cable running from the Recorder's earphone jack to the microphone input port (preferred) or auxiliary input port of the sound card. Make sure that this cable is securely seated at both ends.
2. The volume of the recording might be too low. Check what the volume setting of the Recorder is now (and was when the recording was made).
3. The sound card's input volume might be too low. Check the volume level of the appropriate input ("microphone in" or "auxiliary in") in the "Record" area of sound card's control-panel window.

There's too much noise during playback.

1. The volume of the recording might be too high. Check what the volume setting of the Recorder is now (and was when the recording was made).
2. If the volume seems to be set correctly, there might be some other problem with your sound card. Check with its manufacturer.

Messages you play back are too soft, too loud, or have poor sound quality.

1. Go into the Jet Voice Mail option menu. You should see a sound-quality control button. Click it.
2. If turning on sound-quality control doesn't help, experiment with the volume level of the appropriate input ("microphone in" or "auxiliary in") in the "Record" area of sound card's control-panel window. Make several test recordings at different volume levels and use the level at which playback sounds best.

9.2 Calling Black Box

If you determine that your Digital Voice Recorder is malfunctioning, *do not attempt to alter or repair it*. It contains no user-serviceable parts. Contact Black Box Technical Support 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;
- any external devices and cables involved in the problem;
- anything that appears to create the problem or make it worse; and
- the results of any testing you've already done.

9.3 Shipping and Packaging

If you need to transport or ship your Digital Voice Recorder:

- Package it carefully. We recommend that you use the original container.
- Before you ship the unit back to Black Box for repair or return, contact us to get a Return Authorization (RA) number. If you return the Recorder, make sure to include everything you received with it.

NOTES



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