Memorex®

120-Minute Digital Voice Recorder with VOX
MODEL MB2052

Before operating this product.
Please read these instructions completely.

Features

Your MB-2052, 120-Minute Digital Recorder with VOX is lightweight, compact and easy to operate. You can use it to record up to 127 messages using solid-state flash memory so you never need tape. Your recorder has these features:

Flash Storage Memory
- Digital recording means no tapes to load

120-Minute Record/Play
- Lets you record and store messages in three separate storage areas (120 minutes total in 3 folders), letting you store notes on different subjects separately.

VOX
- Lets you set the recorder to automatically record when it picks up sound and stop after a few seconds of silence.

Remaining/ Elapsed Time Indicator
- Lets you see how much recording time is left and how much you have already used.

Message Erase
- Makes it easy to erase individual or all messages you no longer want.

Message Full
- Lets you know that the memory is full and recording cannot be continued before undesired messages are erased.

Liquid-Crystal Display
- Makes reading information easy in low-light situations.

Built-in Microphone
- Lets you conveniently record anywhere.

Earphone Jack
- Lets you use an earphone (not supplied) for private listening.

External Microphone Jack
- Lets you use an optional external microphone to extend your recording range.

Message Briefing
- Lets you speedily locate a message you want.

FCC Information

This equipment complies with the limits for a Class B digital device as specified in Part 15 of FCC rules. These limits provide reasonable protection against radio and TV interference in a residential area. However, your equipment might cause TV or radio interference even when it is operating properly. To eliminate interference, you can try one or more of the following corrective measures:

- reorient or relocate the receiving antenna
- increase the distance between the equipment and the radio or TV set.

CONTENTS

PREPARATION
INSTALLING BATTERIES
You can power the recorder using AAA batteries(not included). For the best performance and longest life, we recommend alkaline batteries.
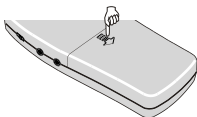
Follow these steps to install the batteries
1.　Remove the battery compartment cover by sliding it in the direction of the arrow.
2.　Insert batteries in the compartment as indicated by the polarity symbols (+ and -) inside.
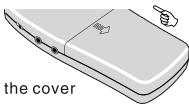3.　Replace the cover.

1.Open the cover

2.Insert batteries
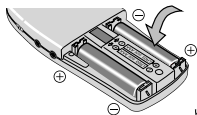
3.Close the cover

Cautions:
- Use only fresh batteries of the required size and recommended type.
- Do not mix old and new batteries (standard, alkaline, or rechargeable), or rechargeable batteries of different capacities.
- Never leave dead or weak batteries in the recorder. Batteries can leak chemicals that can damage the recorder's electronic parts.
- If you do not plan to use the recorder for several days, remove the batteries.

Warning: Dispose of old batteries properly; do not bury or burn them.

LCD DISPLAY

File
Message No.
Time indication

A B C
99
SPLP
22200

Recording indicator
SP mode
LP mode
Full battery indicator
Playback indicator
VOX indicator

Minute indication   Second indication

FUNCTION KEYS

Built-in microphone

Recording indication lamp
Liquid crystal display

REC/STOP

VOX

External microphone Jack
Earphone output Jack

HOLD

VOLUME

FF
REV
PLAY/STOP
ERASE

PAUSE/MODE

SPEAKER

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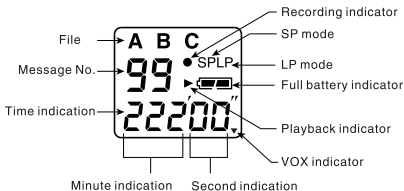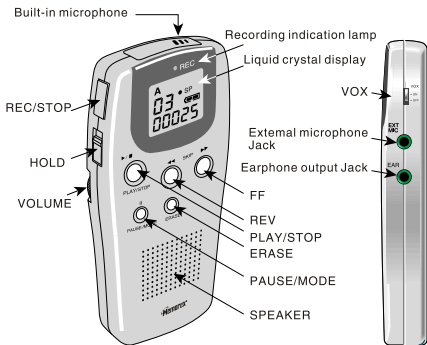
USING AN EARPHONE

For private listening, plug an optional earphone with a 1/8-inch (3.5 mm) plug into the recorder's earphone jack. This automatically disconnects the recorder's internal speaker.

Listening Safely

To protect your hearing, follow these guidelines when you use earphones.

-   Set the volume to the lowest setting before you begin listening. After you begin listening, adjust the volume to a comfortable level.
-   Do not listen at extremely high volume levels. Extended high volume
    Listening can lead to permanent hearing loss.
-   Once you set the volume, do not increase it. Over time, your ears adapt to the volume level, so a volume level that does not cause discomfort might still damage your hearing.

Traffic Safety

-   Do not wear an earphone while operating a motor vehicle or riding a bicycle. This can create a traffic hazard and could be illegal in some areas.
-   Even though some earphones let you hear some outside sounds when listening at normal volume levels, they still can present a traffic hazard.

USING AN EXTERNAL MICROPHONE

To record using an optional external microphone, plug the microphone into the MIC jack on top of the recorder. This automatically disconnects the built-in microphone.

OPERATION

TURNING THE RECORDER ON/OFF

In power off mode, any of the three buttons, PLAY/STOP, REC/STOP or PAUSE/MODE can be used to turn on power. The recorder automatically turns off in 30 seconds if no key is pressed in stop mode.

BATTERY INDICATORS

The recorder has two battery indicator icons. When the battery voltage is above 2.0V, the battery capacity is displayed as full. When the battery voltage is below 2.0V, the battery capacity is displayed as empty, reminding you to replace batteries.

Battery voltage >2.0V   Battery voltage <2.0V

RECORDING MESSAGES

You can record using the VOX feature (see "Voice Activated (VOX) Recording" on Page 10) or you can manually record using REC/STOP button (See "Manual Recording" on Page 10).

Selecting a Folder

The recorder has 3 memory storage areas: Folder A, B and Folder C.Totally, you can store up to 127 messages of 120 minutes recording.The recorder is preset to use Folder A.

Follow these steps to select a folder

1. Press PAUSE/MODE key in stop mode for more than 1 second, FILE appears.

   The selected file flashes

2. Repeatedly press SKIP buttons REV/FF to select the desired folder (A, B or C).

3. Press PAUSE/MODE button to confirm.
   Note: If the recorder becomes full during recording, FULL is displayed. To continue recording, erase undesired messages.

   Use FF/REW to select a file

SELECTING RECORDING QUALITY

The recorder provides two different voice recording mode of quality. To get better sound quality, Standard Play (SP) is desired. To have longer recording time with reasonable sound quality, Long Play(LP) is desired.

Follow these steps to select between LP and SP

1. Press PAUSE/MODE button in stop mode for more than 1 second, FILE appears. After FILE appears, press PAUSE/MODE button again, SP LP shows on the display.

2. Repeatedly press SKIP buttons REV/FF to select the desired recording mode (SP or LP).

3. Press PAUSE/MODE button to confirm.
   Note: The recorder is preset to Long Play (LP) recording.
   120 minutes of recording time is available when long play (LP) is selected.
   15 minutes of recording time is available when standard play (SP) is selected.

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MANUAL RECORDING

The recorder is preset to VOX off. When VOX is set to off, The VOX indicator icon ▲ does not appear.

1. In power off mode, press any of the three buttons, REC/STOP, PLAY/STOP or PAUSE/MODE to turn on power.
2. Press REC/STOP again. The recording indicator REC lamp turns on. A new message number and REC appear on the display and soon the elapsed recording time is also shown.
3. Press PAUSE/MODE key, PAUSE appears and flashes to pause recording. Press REC/STOP button once again to stop recording.


REC appears   The elapsed recording time

Note: - When you begin recording in the folder you selected, the recorder assigns a number to your recording and displays the number on the display. The count starts at 1. Each time you end a message and start a new one, the count increases, up to 99.
- The built-in audio level control automatically sets the recording level.
- To record another message, press REC/STOP button. The message number increases by one and the new message is saved after any messages you have already recorded.

VOICE ACTIVATED (VOX) RECORDING

To set VOX on, switch VOX button on the side of the recorder to ON position and VOX indicator icon ▲ appears on the right bottom of the display.

VOX switch

To automatically start and stop recording based on sound it detects, select the folder you want to use (see " Selecting a Folder" on Page 9) then press REC/STOP button. The recording indicator REC lamp turns on. A new message number and REC appear on the display. When you see these, speak into the built-in microphone. In case no sound is detected, PAUSE appears and both REC lamp and PAUSE change to be flashing.
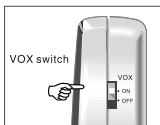
Note: The built-in Automatic Level Control (ALC) automatically sets the recording level once recording starts.

Recording Distance
For normal voice levels, a distance of 5 to 9 inches (13 to 22 cm) between the recorder and the recording source (person speaking, for example) should be appropriate. To find the optimum distance between the recording source and the recorder, experiment with various distances.

CHECKING RECORD DETAILS
1. When you select any message by FF/REW key in stop mode, the message number and its record length will be shown on the display.
2. Press PLAY/STOP key during recording, the remaining recording time is displayed.

The remaining record time

Press PLAY/STOP key

Note: Remaining Time is the estimate time left for recording under current recording mode.

PLAYING BACK MESSAGES
Your recorder has several options for playing back your messages. You can play the most recent message and go directly from playback to recording. You can also fast forward through messages or skip backward or forward to get to the message you want to hear.

To play back a message you recorded
1. In power off mode, press any of the three buttons, REC/STOP, PLAY/STOP or PAUSE/MODE to turn on power.
2. Press PLAY/STOP key again. The recorder shows PLAY and plays back the most recent message, then stops.
3. Press PAUSE/MODE key. The recorder will pause playing back the message and PAUSE appears and flashing.
4. To resume normal playing back, press PLAY/STOP key once again.

Note: During playing back a message, the elapsed time of the current message will be shown. To stop playback, press PLAY/STOP key again.

Fast Forward/Rewind
During playback, press and hold FF/REW for more than 1
second, the recorder plays forward and backward quickly.
Release it at your desired point to resume normal speed.

SKIPPING MESSAGES
You can skip messages during playback.

To move back to the beginning of the current message, simply
press REW key once and release it immediately.

To skip the current message and go to the previous message,
quickly press REW key twice.

To skip the current message and go to the next message, press
FF key once and release it immediately.

USING SCAN PLAYBACK
Follow these steps to set the recorder to play the first 5 seconds
to each recorded message.
1. If you are playing back a message, press PLAY/STOP key.
2. Press PLAY/STOP key once again for more than 2 seconds.
    SCAN appears. The recorder automatically starts from
    message 1 to play back the first 5 seconds of all messages.
3. The recorder automatically stops after it plays the last
    message.
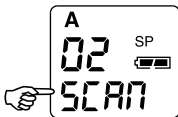
MESSAGE FULL

When 99 messages in 1 file or totally 127 messages in 3 files have been recorded or the recorder has reached its maximum recording time (120 minutes in LP recording mode and 15 minutes in SP recording mode), "FULL" shall be displayed. To continue your recording, erase any undesired messages (See "ERASING MESSAGES " on Page 13).
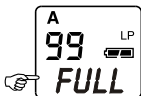
ERASING MESSAGES

You can erase an individual message or all the messages in all folders.

Erasing a single message

1. Select the message you want to erase by FF/REW keys (See "Skipping Messages" on Page 12)
2. Press ERASE key. ERASE appears and the first 5 seconds of the message start to be played.
3. Press ERASE key once again during playback, this message is erased and the remaining messages are renumbered.
4. To stop erasing, press any of the buttons except ERASE before step "3" is executed. To erase other messages, repeat the steps from 1 to 3.

Erasing all messages in 3 folders

1. In stop mode hold down ERASE key.
2. Then hold down REC/STOP button for more than 3 seconds. ALL and ERASE appear sequentially.
3. Press ERASE key once again within 5 seconds to confirm erasing. All messages in 3 folders are erased once for all. If ERASE is not pressed within 5 seconds, ERASE ALL will not be executed.

Note: Erased messages cannot be recovered

KEY LOCK
To prevent unintentional operation of the recorder, slide the HOLD switch upward will disable all function keys and HOLD appears.

RESETTING THE RECORDER
If your recorder is exposed to a strong static electrical charge, the recorder might lock up or the display might dim. This rarely happens, but if it does, reset the recorder by removing batteries and reinstalling it. All settings return to the preset values except the messages are kept without change.

CARE

Your MB-2052, 120-minute Digital Recorder is an example of superior design and craftsmanship. The following suggestions will help you care for your recorder so you can enjoy it for years.

- Keep the recorder dry. If it gets wet, wipe it immediately. Liquids might contain minerals that can corrode the electronic circuits.
- Use and store the recorder only in normal temperature environments. Temperature extremes can shorten the life of electronic devices, damage batteries, and distort or melt plastic parts.
- Keep the recorder away from dust and dirt, which can cause premature wear of parts.Handle the recorder gently and carefully. Dropping it can damage circuit boards and cases and can cause the recorder to work improperly.
- Use only fresh batteries of the required size and recommended type. Batteries can leak chemicals that damage your recorder's electronic parts.
- Wipe the recorder with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the recorder.

Modifying or tampering with the recorder's internal components can cause a malfunction and might invalidate its warranty and void your FCC authorization to operate it.

SPECIFICATION

Recording System	Built-in Flash Memory
Recording Time	120 minutes
Speaker	0.2w/8 ohm
Output Power	80mW
Power Supply	2xAAA Alkaline Batteries
Battery Life	Approx. 10 hours at recording mode Approx. 6.5 hours at speaker play at volume 5
Dimensions (HWD)	110 x 50 x 16.5 (mm)
Weight	approx.50g/ without batteries

Memorex®
LIMITED WARRANTY
PERSONAL ORGANIZER

We at MEMOREX believe you will be pleased with your new Audio Product. Please read this Warranty carefully. Memorex warrants this product to be free from manufacturing defects including original parts and workmanship for a period of ninety (90) days from the date of original purchase in, and if used in , the United States.

Should you find your unit is not operating properly during the terms of full coverage of this warranty, ninety (90) days, you should contact your original place of purchase for an exchange with a valid receipt. If necessary, Memorex will provide one of the following options (at Memorex's discretion), providing the manufacturing defect is verified along with the date of purchase.

- Repair service for ninety (90) days from the date of original purchase at no charge for labor and parts.
- Replacement of your defective unit with either a new, refurbished, or equivalent model at no charge for ninety (90) days from the date of original purchase.

This warranty is void if the product is:
A) Damaged through negligence, abuse, misuse, accident, or acts of God.
B) Used in commercial applications or rentals.
C) Modified or repaired by anyone other than Memorex or their expressly authorized representative.
D) Damage resulting from the improper connection to equipment of other manufacturers.

This warranty does not cover:
A) Cost incurred in the shipping of the product to and from the Memorex authorized repair facility listed.
B) Damage or improper operation caused by the failure to follow the operating instructions provided with the product.
C) Routine adjustments to the product which can be performed by the customer as outlined in the owner's manual.
D) Products not purchased in the United States.
E) damage to the products used outside the United States.

In the event that service is required under this warranty, please call our free toll number at 1-800-919-3647 for instructions.

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Note: 1. When the low battery indicator icon appears on the LCD display, and you are recording a message, be sure to press REC/STOP button to stop recording so that you might not lose your messages before new batteries are supplied.

2. Re-install the batteries when the unit malfunctions.