

Panasonic

Operating Instructions
IC Recorder

Model No. RR-US490
RR-US470
RR-US455
RR-US450
RR-US430

The illustration shows RR-US470.

Dear customer

Thank you for purchasing this product.
For optimum performance and safety, please read these instructions carefully.
Before connecting, operating or adjusting this product, please read the instructions completely.
Please keep this manual for future reference.

E

RQT8828-1B

Instruction flow chart

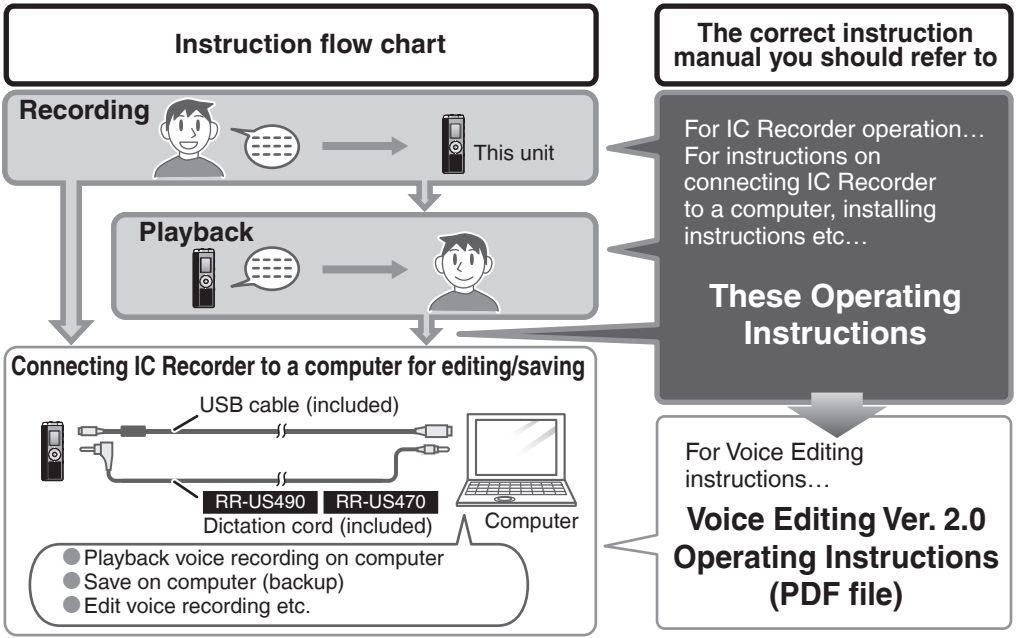


Table of contents

Preparation

Instruction flow chart **2**
Supplied accessories **4**
Inserting batteries **4**
Before use **5**
Point 1 Before operating, switch Hold off, when finished, switch Hold on. 5
Point 2 Recordings become audio files and the files are stored in folders. 6
Point 3 Choose a recording method that best suits the situation. 7
Part names **8**
How to use the quick search dial **9**
List of menus **10**
Setting the time **11**
Canceling the operation beep **11**

Basic use

Recording **12**
Meeting recording 12
Display during recording 12
Dictation recording 13
Stop and pause 13
Confirming the remaining time 13
Other recording methods **14**
Zoom recording (recording target voice clearly) 14
Recording through an external microphone 14
Listening to the recording in progress 14
Preventing unnecessary recording (VAS) 15
Timer recording 15
Playing **16**
While a file is being played
● Adjusting the volume 16
● Moving forward/Moving backward 16
● Making recorded sounds easier to catch (reducing noise) 16
Other playing methods **17**
Searching points for listening (fast forward and fast backward) 17
Changing the playback speed 17
Playing files successively 18
Listening with earphones 18

Advanced use

Organizing files **19**
Deleting 19
Moving 19
Lock (file protection) 19
Security functions **20**
Security functions of this unit 20
Folder S and password 20
Setting the password 20
Playback using the password 21
When you forget the password 21
Recording to / from a cassette tape **22**

Reference

Using the unit with a computer **23**
Troubleshooting guide **30**
Sales and Support Information **33**
Care and use **34**
Maintenance **36**
Specifications **37**
Panasonic Warranty (ONLY FOR AUSTRALIA/NEW ZEALAND) **39**

Supplied accessories



Use numbers indicated in parentheses when asking for replacement parts.
(Product numbers correct as of April 2008. These may be subject to change.)

All models

☐ 1 USB cable
[K2KZ4CB00012]

RR-US490 **RR-US470**

☐ 1 Dictation cord
[K2KC2CB00001]

RR-US490 **RR-US470** **RR-US455** **RR-US450**

☐ 2 CD-ROM
(Voice Editing Ver.2.0 Premium Edition)

RR-US455

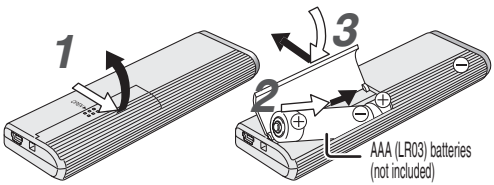
☐ 4 CD-ROM
(Dragon, NaturallySpeaking 7 Preferred)

RR-US430

☐ 1 CD-ROM
(Voice Editing Ver.2.0 Standard Edition)

Refer to page 33 for Sales and Support Information (for the United Kingdom and Republic of Ireland).

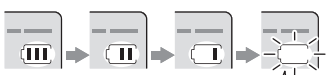
Inserting batteries



Make sure the batteries face the right directions.

- Replace the batteries within 30 seconds to preserve the settings. (Recordings remain intact.)
- The clock, however, will stop until the batteries have been inserted.
- If rechargeable batteries are to be used, rechargeable batteries manufactured by Panasonic are recommended.
- When batteries are inserted, "2008" or "2007" flashes on the display. Set Hold off (➜ page 5) and set the time (➜ page 11).

The battery indicator
(Displayed during recording/playback)



Replace the batteries.

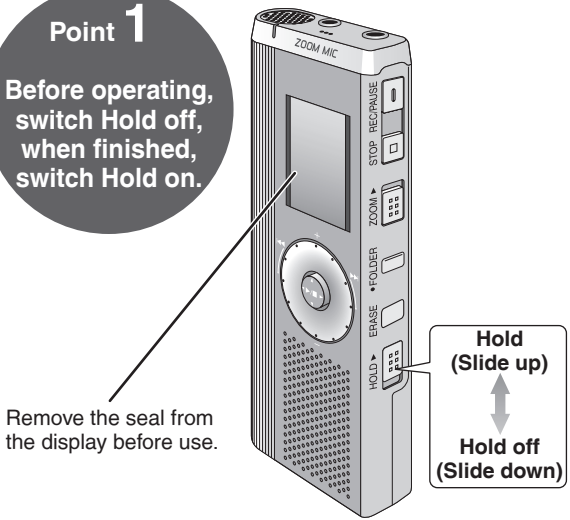
"▷¦◁" indicates flashing.

- When "LO1" is displayed, replace the batteries.

Before use

Point 1

Before operating, switch Hold off, when finished, switch Hold on.



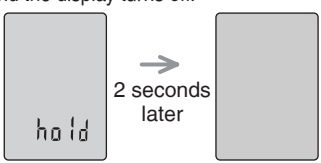
Remove the seal from the display before use.

Hold function

- This function prevents accidental operation when you put the unit in your pocket or bag. It also prevents battery loss from accidental unit operation.

When you set Hold on

- Button operations are ignored even if you press buttons by mistake.
- When you set Hold on while recording or playing, "hold" appears for 2 seconds and the recording or playing display reappears.
- When you set Hold on while the unit is stopped, "hold" appears for 2 seconds and the display turns off.



This unit has no power button.

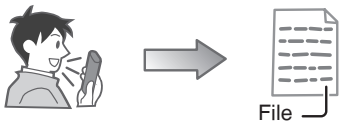
- You can make batteries last longer by setting Hold on and turning the display off.

Before use

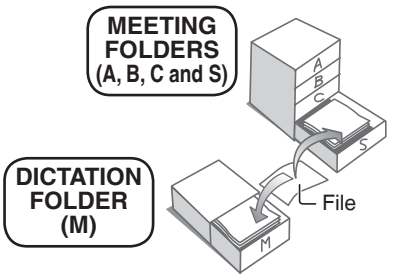
Point 2

Recordings become audio files and the files are stored in folders.

A new audio file is created each time you record.



The created file is stored in a folder.



- A maximum of 99 files can be stored in each folder.
- Remaining recording time (➜ page 13) may become shorter than periods listed in this table.

Approximate total recording time of all folders

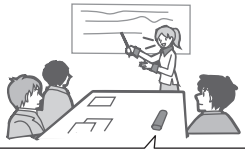
Recording mode \ Model	RR-US490	RR-US470	RR-US455/RR-US450	RR-US430
HQ (High quality)	79 hours 10 minutes	39 hours	19 hours 10 minutes	9 hours 40 minutes
FQ (Fine quality)	158 hours 30 minutes	78 hours 10 minutes	38 hours 30 minutes	19 hours 30 minutes
SP (Standard play)	271 hours 30 minutes	134 hours	66 hours	33 hours 20 minutes

Point 3

Choose a recording method that best suits the situation.

MEETING RECORDING

Using different combinations of recording modes and microphone sensitivity levels, you can adjust audio quality according to recording situations. Using the zoom function, you can also record target voice clearly (➜ page 14).



To record a low-level sound source...

- Place the unit on a desk etc. closer to the source.
- Use "L" microphone sensitivity for close proximity hand-held recording.

Meeting recording settings

Microphone sensitivity		H (Far)	L (Near)
Zoom recording	[OFF]	A normal meeting	A meeting held in a small room
	[ON]	A lesson, lecture	An interview during a meeting
Recording mode		HQ (high quality)/ FQ (fine quality)/ SP (standard play)	

DICTATION RECORDING

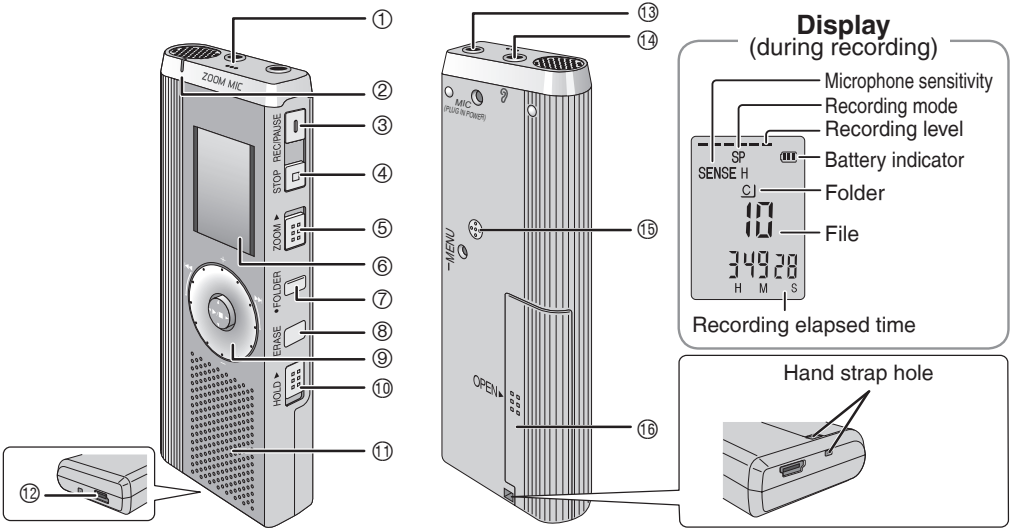


As the dictation recording settings are all factory-set, dictation can be recorded quickly and simply. Use this mode when computer voice recognition software is to be used.

Dictation recording settings

Microphone sensitivity	Dictation Recording level (fixed)
Recording mode	HQ (high quality) (fixed)

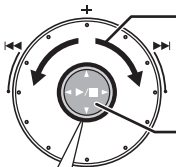
Part names



①Built-in microphone	⑥Display	⑪Speaker	⑭Headphone/earphone jack
②Recording indicator	⑦Folder/menu	⑫USB jack	⑮Zoom microphone (dented area)
③Record/pause	⑧Erase	⑬External microphone jack	⑯Battery cover
④Stop	⑨Quick search dial		
⑤Zoom	⑩Hold		

How to use the quick search dial

Basic operations



Ⓐ: Dial:
Turn the dial to right or left to select an item.

Ⓑ: Joystick:
Press to confirm the item.

In this manual

Ⓐ:Turn [↙/↘].

Ⓑ:Press [▶/■] to confirm.

●Avoid pressing too much when you turn the quick search dial.

Joystick operations (see above Ⓑ for the confirming operation)

Playback (➜ pages 16 and 17)
Password entry (➜ pages 20 and 21)

※ You can also select items by tilting the joystick. This manual explains dial operations in most sections.



Ⓒ: Tilt the stick to left and right.

Ⓒ: Tilt the joystick to [◁/▷].

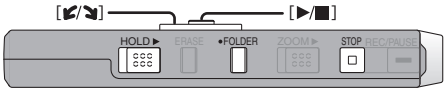
Volume control



Ⓓ: Tilt the stick up and down.

Ⓓ: Tilt the joystick to [△/▽].

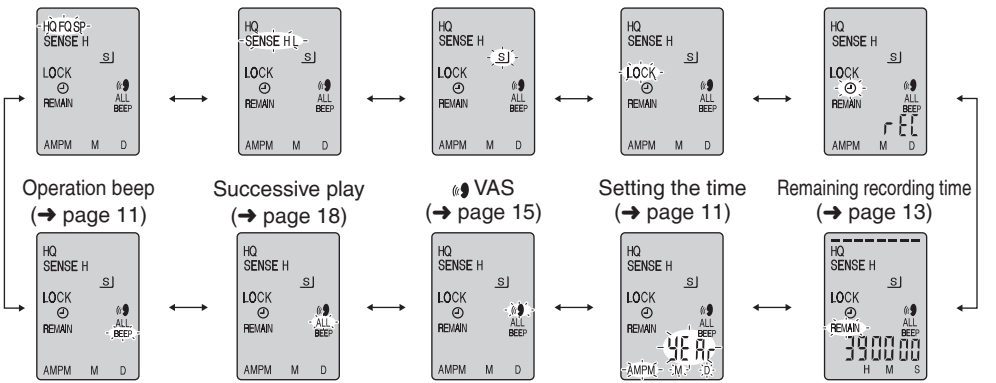
List of menus



① Press and hold [•FOLDER/━ MENU] for 1 second or longer (while stopped) to display menus.
② Turn [◤/◥] and press [▶/■] to confirm.

- Press [STOP] to stop an operation midway/cancel the setting.
- If an operation is not started within 60 seconds, unfinished settings are canceled.

Recording mode※1 (➔ page 12)
Microphone sensitivity※1 (➔ page 12)
Security (➔ page 20)
Lock※2 (➔ page 19)
Timer recording※3 (➔ page 15)
Operation beep (➔ page 11)
Successive play (➔ page 18)
VAS (➔ page 15)
Setting the time (➔ page 11)
Remaining recording time (➔ page 13)



※1 Displayed only when a Meeting Recording folder (A, B, C or S) is selected.
※2 Displayed only when there is a recorded file.
※3 Displayed only when the clock is set.

Setting the time

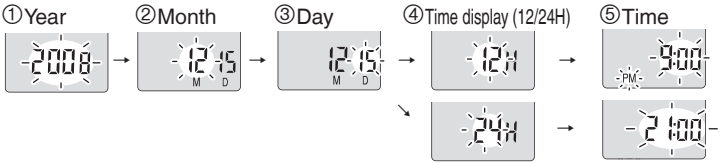
● When the year is flashing (e.g. "2008" or "2007" on the display), begin from step ***4***.

1 Set Hold off
(➜ page 5)

2 Display the menu
While stopped, press and hold [•FOLDER/– MENU] for 1 second or longer.

3 Select "YEAr"
Turn [↙/↘] to select "YEAr" and press [▶/■] to confirm.

4 Set the time
Turn [↙/↘] and press [▶/■] to confirm. (Press [STOP] after confirming ⑤.)



● The clock operates with the monthly error margin of +/– 60 seconds at room temperature.
● The clock returns to standby when you perform no time setting operation for 60 seconds. If this happens restart setting the time.

Canceling the operation beep

1 Display the menu
While stopped, press and hold [•FOLDER/– MENU] for 1 second or longer.

2 Select "BEEP"
Turn [↙/↘] and press [▶/■] to confirm.

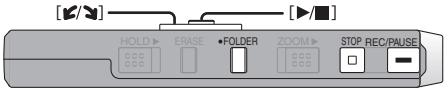


3 Select "OFF"
① Turn [↙/↘] and press [▶/■] to confirm.
② Press [STOP].



● To use the operation beep, select "On" in step ***3***.

Recording



Meeting recording

Using different combinations of recording modes and microphone sensitivity levels, you can adjust audio quality according to recording situations.

1 Select a Meeting Recording folder (A, B, C or S)

Press [•FOLDER/ ━ MENU].



Each time you press:

A→B→C→S
↑ M ←

2 Display the recording mode menu

①Press and hold [•FOLDER/ ━ MENU] for 1 second or longer.

②After making sure the display at right, press [▶/■] to confirm.



3 Select the recording mode

①Turn [◤/◥].

HQ ↔ FQ ↔ SP

②Press [▶/■] to confirm.



HQ: High quality
FQ: Fine quality
SP: Standard play

● The factory setting is "HQ".

4 Select the microphone sensitivity level

① Press [▶/■] to display microphone sensitivity.

② Turn [◤/◥] and press [▶/■] to confirm.

③ Press [STOP].



H: Far
L: Near

5 Record

Press [REC/PAUSE].

Display during recording

Display changes depending on recording levels.

Light stays on while recording. (Flashes while paused.)



Recording elapsed time (Flashes while paused.)

Dictation recording

As the dictation recording settings are all factory-set, dictation can be recorded quickly and simply.
Use this mode when computer voice recognition software is to be used.

1 Select folder M

Press [•FOLDER/ ▬ MENU].

Each time you press:

A → B → C → S
↑ ← M ←



2 Record

Press [REC/PAUSE].

Stop and pause

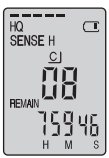
- Press [STOP] to stop recording.
- The following recording information is displayed when recording is stopped.

Recording date	→	Recording start time	→	Recording time	→	The number of files in folder

- While recording, press [REC/PAUSE] to pause. Press it again to resume recording. (Recording continues in the same file.)

Confirming the remaining time

When you press [•FOLDER/▬ MENU] while recording, the remaining recording time appears.



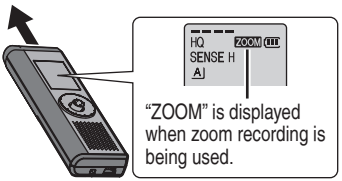
- To return to the initial menu, press [•FOLDER/▬ MENU] again.
- Remaining recording time also appears when the time becomes very short.

Other recording methods

■ Zoom recording (recording target voice clearly)

Zoom recording enables you to clearly record sounds coming from the direction this unit is aimed at. It is suitable for recording lectures and interviews.
Select Meeting Recording folders (➜ page12).

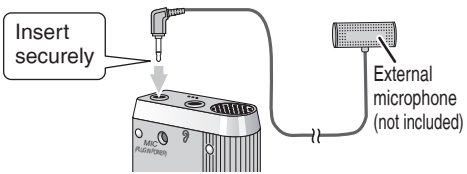
Aim this unit to the sound you want to record and slide [ZOOM ▶] toward the arrow.



- Do not block the zoom microphone (➜ page 8) intentionally with your fingers or other items.
- Zoom recording can be switched on and off even when Hold is on.
- The zoom function does not work when you select folder M or when you use an external microphone.

■ Recording through an external microphone

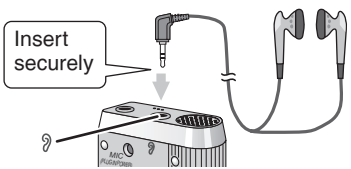
- When you attach an external microphone, the built-in microphone automatically goes off.
  Plug type: ø 3.5 mm monaural mini plug

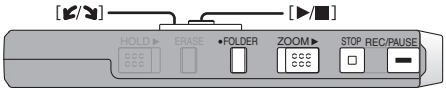


■ Listening to the recording in progress

Connect earphones (not included).
(Sounds are monaural.)
Plug type: ø 3.5 mm mini plug

- The volume is fixed for recording.





■ Preventing unnecessary recording (VAS: Voice Activated System)

Recording is automatically paused if there is no sound for more than 3 seconds.

1 Display the menu

Press and hold [•FOLDER/ ─ MENU] for 1 second or longer.

2 Select "((•))"

Turn [◩/◪] and press [▶/■] to confirm.



3 Select "On"

①Turn [◩/◪] and press [▶/■] to confirm.
②Press [STOP].



4 Record

(➜ page 12)
"((•))" flashes when the VAS function is active.

- ! Turn the function off when recording important files.
- To turn the function off, select "OFF" in step ***3***.

■ Timer recording

Timer recording can be set to make 1 recording at a specified time. After setting the timer, you can keep the unit on standby by setting hold on (➜ page 5).

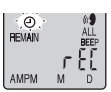
Preparation: Select the folder to be recorded to and the recording settings (➜ page 12).

1 Display the menu

Press and hold [•FOLDER/ ─ MENU] for 1 second or longer.

2 Select "⏲"

Turn [◩/◪] and press [▶/■] to confirm.



3 Select "On"

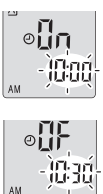
Turn [◩/◪] and press [▶/■] to confirm.



4 Set the time

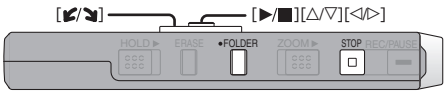
①**Start time**
Turn [◩/◪] and press [▶/■] to confirm.

②**Finish time**
Turn [◩/◪] and press [▶/■] to confirm.



- ! You can stop timer recording in progress, but you cannot bring it to a pause.
- To confirm the recording start and finish time, perform step ***2***.
- To cancel the timer, select "OFF" in step ***3***.
- To close the menu, press [STOP].

Playing

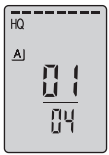


1 Select the folder

Press [•FOLDER/– MENU].

Each time you press:

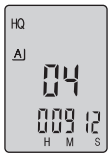
→ AJ → BJ → CJ → SJ → MJ ←



2 Select the file

Turn [↙/↘].

● After selection, information at the time of recording is displayed.



3 Play

Press [▶/■].

● When you press [▶/■] again, playback pauses. Press once more to resume playback.

■ While a file is being played

Adjusting the volume

Tilt the joystick to [△/▽]. (Volume range is 0 to 20. Factory setting is 13.)

Moving forward

Tilt the joystick to [▷].

Tilt and hold to search (➜ page 17).

Moving backward

Tilt the joystick to [◁].

Tilt it twice to play the previous file. (Tilting once starts the playback of the previous file when it has been playing for less than 3 seconds.)

Tilt and hold to search (➜ page 17).

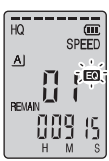
Making recorded sounds easier to catch (reducing noise)

①Press [•FOLDER/– MENU] while playing.

②Turn [↙/↘] to select "EQ" ("EQ" flashes when selected) and press [▶/■] to confirm.

③Turn [↙/↘] to select "On" and press [▶/■] to confirm.

● To cancel, select "OFF" in step ③.



Other playing methods

■ Searching points for listening (fast forward and fast backward)

Quick search

Turn [↙/↘] while playing.

- You can search forward/backward quickly without sound (except the operation beep).
- The fast forward and fast backward speed changes according to the dial turning speed.
- To return to normal playback, stop turning.

Slow search

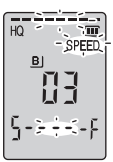
While playing, tilt the joystick to [◁/▷] and hold it in the position for 1 second or longer.

- You can search slowly with sound.
- To return to normal playback, release your finger.

■ Changing the playback speed

Playback is available at 5 different speeds.

Press [•FOLDER/ ▬ MENU] while playing.



The playback speed rises as the flashing bars move right. The illustration shows the display for the normal speed playback.

Turn [↙/↘] to select "SPEED" ("SPEED" flashes when selected), press [▶/■] to confirm, and then turn [↙/↘] to select the playback speed.
The unit performs playback at the selected speed.

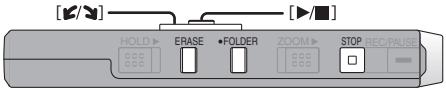
- The bar flashes when listening at a playback speed other than normal.



When playing back at the double speed

- To return to the normal playback speed, move the flashing bars to the center in the way instructed at left.

Other playing methods



■ Playing files successively

Files stored in the same folder are played successively.

1 Display the menu

Press and hold [•FOLDER/– MENU] for 1 second or longer.

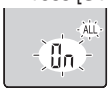
2 Select "ALL"

Turn [◩/◪] and press [▶/■] to confirm.



3 Select " On "

①Turn [◩/◪] and press [▶/■] to confirm.
②Press [STOP].



4 Play

Press [▶/■].

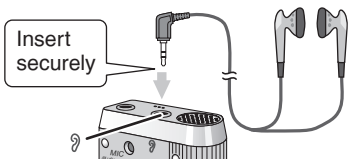


- The unit plays all files in order from the selected one to the last one.
- When the last file finishes, playback stops automatically.
- Press [STOP] twice to stop successive play midway.
- To cancel, select " oFF " in step ***3***.

■ Listening with earphones

Connect earphones (not included).
(Sounds are monaural.)
Plug type: ø 3.5 mm mini plug

- The speaker is automatically turned off when earphones are used.



Organizing files

■ Deleting (a file/ all files in a folder/ all folders except S/ all folders)

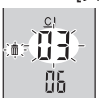
1 Display the deleting menu

Press [ERASE].

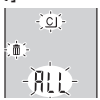


2 Select a file or folder

Turn [↙/↘].



Selecting a file



All files in a folder



All folders except S



All folders

3 Delete

Press and hold [ERASE] for 1 second or longer.



When a file is deleted.

! Deleted files cannot be recovered.

● Protected files cannot be deleted.

■ Moving

Files can be moved both ways among folders A, B and C.

Files can be moved from folder M to folders A, B, C and S, but files cannot be moved to folder M.

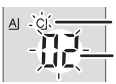
Preparation: Play the file to be moved (➜ page 16).

1 Display the moving menu

Press and hold [•FOLDER/ ▬ MENU] for 1 second or longer.

2 Select the destination folder

Turn [↙/↘].



Destination folder

Number of files in the destination folder

3 Move

Press and hold [▶/■] for 1 second or longer.

Play will stop and the file is moved to the end of the selected folder.

■ Lock (file protection)

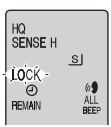
Preparation: Select a folder containing a file to protect.

1 Display the menu

Press and hold [•FOLDER/ ▬ MENU] for 1 second or longer.

2 Select "LOCK"

Turn [↙/↘] and press [▶/■] to confirm.



3 Select the file you want to lock

①Turn [↙/↘] and press [▶/■] to confirm.

②Press [STOP].



● To unlock, select the file you want to unlock, then confirm.

Security functions

MEMO

Password (This unit)	
Authentication key (Voice Editing)	

Security functions of this unit

This unit has 2 security functions.
①Password set in this unit
②Authentication key set with Voice Editing (See Voice Editing Ver. 2.0 Operating Instructions (PDF file).)

Folder S and password

- Folder S is used to secure files. Once set, a password is necessary for playing files in this folder.
- The password is a 4-digit number. You can set the password using any combination of numbers. To play files in folder S, enter the password you set.
- You can move files in other folders to folder S, but you cannot move files in folder S to any of the other folders unless the password matches.

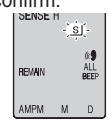
Setting the password

1 Display the menu

Press and hold [•FOLDER/– MENU] for 1 second or longer.

2 Select " S "

Turn [↙/↘] and press [▶/■] to confirm.



3 Select " On "

Turn [↙/↘] and press [▶/■] to confirm.

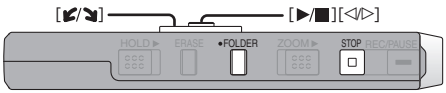


4 Set the password

①Turn [↙/↘] to select a number.
②Press [▶/■] to move to the next digit. After entering the fourth number, press [▶/■] to confirm.
③Press [STOP].



Write down the password in the MEMO space (above) to keep it in memory.
- To initialize the password, select " OFF " in step *3* and enter the password you set.
- To move among digits, tilt the joystick to [◁/▷] in step *4*.



Playback using the password

1 Select folder S

①Press [•FOLDER/ ━ MENU].
②Select " Ⓢ ".

2 Select a file to be played

①Turn [◤/◥].
②Press [▶/■] to confirm.

3 Enter the password

①Enter the 4-digit password.
②Press [▶/■].

When the password matches

The password is temporarily released and the selected file in folder S is played.

When the password is wrong

The unit beeps twice (➜ page 11) and the password entry display reappears.

- When the password matches, the security function using the password is suspended for 10 minutes.
- When the password is released and no operation is performed for 10 minutes, the password is automatically set and files in folder S become unplayable.
- When wrong passwords are entered 5 times in succession, the unit stops accepting password entry for 15 minutes.

When you forget the password

Initialize the password by taking the steps below.
①Release all locks set on files in folder S (➜ page 19).
②Delete all files in folder S. (Deleted files cannot be recovered.)
③Enter the security menu and set the password as " OFF ".

How folder S is displayed

Ⓢ Password is not set
Ⓢ Password is set
Ⓢ During password entry/ password release/playback
Ⓢ Password release to end in 10 seconds

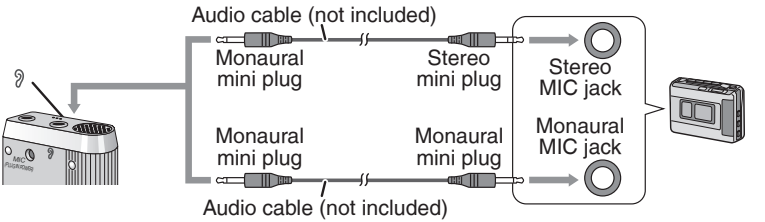
- You can also keep the files in folder S and just delete the password. Connect this unit to a computer and use the computer to delete the password. (See Voice Editing Ver. 2.0 Operating Instructions (PDF file).)

Recording to / from a cassette tape

Read the operating instructions for the connected equipment.

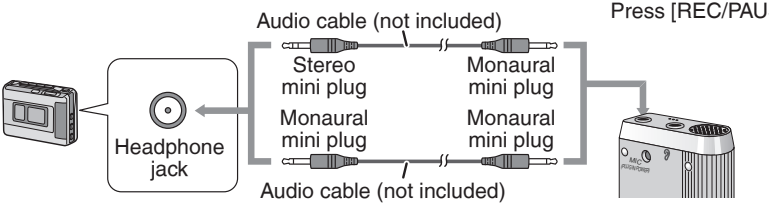
■ Recording to a cassette tape recorder etc.

Select the file to copy and play → **Record**



■ Recording from a cassette tape recorder etc.

Start playing → **Record**
Press [REC/PAUSE]



- The recorded sound may differ from the original recording.
- Adjust the recording volume on the source to the desired level.

Using the unit with a computer

- Voice Editing Ver.2.0 Premium Edition (hereinafter Pr) is included for RR-US490, RR-US470, RR-US455 and RR-US450.
- Voice Editing Ver.2.0 Standard Edition (hereinafter S) is included for RR-US430.
- There are 2 CD-ROMs for Pr. S occupies 1 CD-ROM only.

1 Installing Voice Editing

①Start Windows.

②Insert the included CD-ROM (or CD-ROM #1) into your computer's CD-ROM drive.

The program installer starts automatically.

- When the installer does not automatically start
  (1) From the "Start" menu click "Run".
  (2) Type "※:\Launcher\VEdV1Launcher.exe" and click "OK".
  ※ is the CD-ROM drive ID.

③Click "Voice Editing Ver.2.0".

Installation starts.

Follow on-screen instructions for any subsequent operations.

Pr
- Change the CD-ROM #1 for #2 according to the message that will appear in the middle of installation. Installation continues automatically.
- Change the CD-ROM #2 for #1 according to the message that will appear when the installation of #2 is complete.
- The voice recognition engine and text to speech/translation engine should start installing while Voice Editing is being installed. (Alternatively, you can install them afterwards.)

④Click "Finish" from the InstallShield Wizard Complete screen.

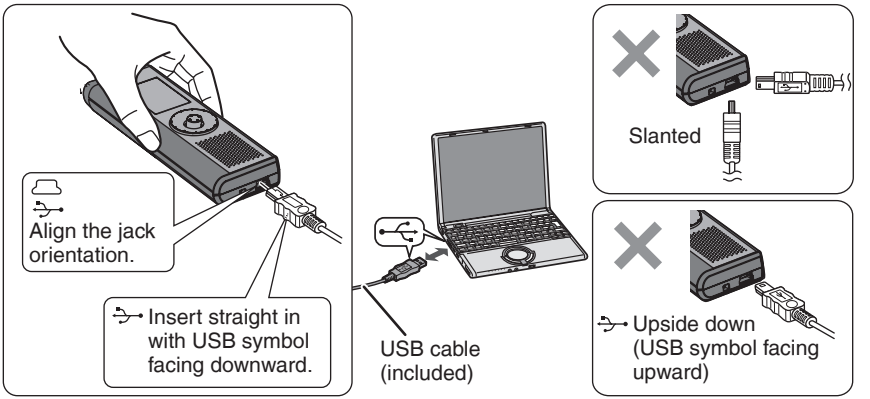
Selecting "Yes, I want to restart my computer now" automatically re-starts the computer and completes installation.

Using the unit with a computer

2 Connecting this unit to a computer with the USB cable

You cannot operate the unit while it is connected to a computer.

- Do not use any other USB connection cables except the supplied one.



! Connect one IC Recorder only. This software does not support simultaneous use of multiple IC recorders.

Caution: Use only the included USB cable with a ferrite core when connecting to computer.

- When connected to a computer, " PC " appears. When transferring data, " PC " flashes.

! Do not disconnect the USB cable while " PC " is flashing.



3 Starting Voice Editing

①**Double-click the "Voice Editing" icon on the desktop.**



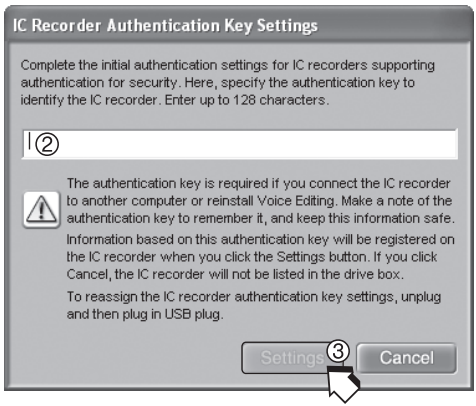
After double clicking, a dialog box for entering the authentication key appears.

②**Enter the "authentication key".**

- Enter an "authentication key" that has 1 to 128 characters.
- We recommend that you use a phrase that is easy to remember for the "authentication key".
  Example: *Good morning, this is Matsushita Electric Industrial Co., Ltd. How can I help you?*
- Write down the authentication key in the MEMO space (➜ page 20) to keep it in memory.

③**Click "Settings" in the "IC Recorder Authentication Key Settings" dialog box.**

④**Click "Yes" in the confirmation dialog box.**



See Voice Editing Ver. 2.0 Operating Instructions (PDF file) for how to use Voice Editing and other information not provided in this manual.

■Using the Operating Instructions (PDF file)

In the Windows "Start" menu, click "All Programs" → "Panasonic" → "Voice Editing" → "Voice Editing Operating Instructions" or in the "Help (H)" menu in the Voice Editing main screen, click "Operating Instructions (H)".

Using the unit with a computer

■ System requirements (through page 29)

You will need an IBM PC/AT computer with the following attributes or equivalent, and the following software and hardware in order to use this application.

OS: Microsoft® Windows® 98 Second Edition
Microsoft® Windows® Millennium Edition
Microsoft® Windows® 2000 Professional ※
Microsoft® Windows® XP Home Edition/Professional ※

※Only available when the user is logged in as the system administrator. Cannot be used by multiple users. (Windows® 2000 / Windows® XP only)

- Not compatible with Microsoft Windows® 3.1, Windows® 95, Windows® 98 (except for Windows® 98 SE) and Windows NT®.
- Operation is not guaranteed on an upgraded OS.
- Not compatible with Mac OS.

Hardware:

CPU: Windows® 98 SE / Windows® Me: Intel® Pentium® II 333 MHz or higher
Windows® 2000 / Windows® XP: Intel® Pentium® III 500 MHz or higher

RAM: Windows® 98 SE / Windows® Me: 128 MB or more
Windows® 2000 / Windows® XP: 256 MB or more

Free hard disk space:

Pr 150 MB or more

- Additional free hard disk space may be necessary depending on the Windows® version and voice file being used.
- Additional free space is required to install Acrobat® Reader®, DirectX® 9.0c, and voice recognition/text-to-speech/translation engines (all included), as well as "Voice Editing Launcher"(Office Add-In and Internet Explorer Contextual Menu Add-In).
- Additional free space is temporarily required for sound waveform display, voice recognition, text-to-speech conversion, translation, sound recording, CD-R recording (Windows® XP only), and "Voice Editing Launcher".
- Installing all Voice Editing functions and engines for all languages requires approximately 1.5 GB of free space.

S 120MB or more
•Additional free hard disk space may be necessary depending on the Windows® version and voice file being used.
•Approximately 25MB of additional free hard disk space when installing Acrobat® Reader® (included).
•Approximately 50MB of additional free hard disk space when installing DirectX® 9.0c (included).

Drive: CD-ROM drive (for installation)
CD-R/RW drive (required to use the CD-R writing function in Windows® XP)
Sound: Windows compatible sound device
Display: High Color (16 bit) or more. Desktop resolution of 800 × 600 pixels or more.
(1024 × 768 pixels or more recommended)
Interface: USB port (Operation cannot be guaranteed if you use a USB hub or extension cable.)
Other requirements:
Mouse or equivalent pointing device

Note
The following hardware limitations should be noted.
• Not compatible with multiprocessor computers or multiboot environments.
• Operation not guaranteed on user-built computers.
• Operation not guaranteed on 64-bit computers.
• Even if the system requirements mentioned in these operating instructions are fulfilled, some personal computers cannot be used.
The following limitations should be noted.
• Voice recognition, text-to-speech, and translation engines are installed on the same drive as the operating system (usually the C drive).

Using the unit with a computer

- The operating system must support the languages of the voice recognition, text-to-speech, and translation engines.
- Before voice recognition, the speaker's voice must be registered in a training process. Sound files of speakers whose voices have not been registered in training cannot be converted to text correctly.

About Windows Vista

- Visit the following website for information about Voice Editing and using it on Windows Vista.
  http://panasonic.net/support/ (This website is in English only.)

Necessary software:

DirectX® 8.1 or later / Internet Explorer 6.0
Microsoft Office 2000/XP/2003 (support for Word, Excel, and PowerPoint is required when using the Office Add-in) These features are not available in S.

- Microsoft and its logo as well as Windows, Windows Vista, Windows NT and DirectX are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- IBM and PC/AT are registered trademarks of International Business Machines Corporation of the U.S.
- Intel, Pentium and Celeron are registered trademarks or trademarks of Intel Corporation in the United States and other countries.
- Nuance, the Nuance logo, the Dragon logo, Dragon, NaturallySpeaking, and RealSpeak are trademarks and/or registered trademarks of Nuance Communications Inc., and/or its affiliates in the United States and/or other countries.
- Noise cancellation features of this software incorporate technology of ANIMO LIMITED.
- Adobe and its logo, Acrobat, and Acrobat Reader are trademarks of Adobe Systems Incorporated.
- FineSpeech(TM).
- Other system names and product names appearing in this document are in general the registered trademarks or trademarks of the respective developer companies.
  Note that the "TM" mark and "®" mark do not appear in this document.

Pr Install and use Voice Editing Ver.2.0 Premium Edition with RR-US490, RR-US470, RR-US455 and RR-US450.
Uninstall the following before installing this software.
You cannot install two versions of Sound File Management Software on the same computer.
- Voice Editing Ver.1.0 Premium Edition
- Voice Editing Ver.1.0 Professional Edition
- Voice Editing Ver.1.0 Standard Edition
- Voice Editing Ver.1.0 Light Edition for D-snap Audio
- Voice Editor 3
- Voice Editor 2
- Previous versions of Voice Editing software (for Panasonic IC Recorder RR-US360/RR-US361)
- SD Voice Editor Ver. 1. x

S Install Voice Editing Ver.2.0 Standard Edition when you use RR-US430. Previous versions do not work with RR-US430. Standard Edition can be installed on the same computer on which a previous version is already installed.
If you install it on the same computer, note that the new desktop icon is as shown at right.
To use only one edition, uninstall both editions and then reinstall the desired edition.



- Translation (and interpretation) results are merely one example, and accuracy cannot be guaranteed. We cannot be liable for the translation results in any way. Additionally, please refrain from publishing, selling, or distributing unedited translation results, which may violate copyright law.
- Noise cancellation may not be effective in some cases, depending on the recording environment. Choosing stronger noise cancellation in the available range (1–5) may lower the volume of the recorded voice and may change its sound characteristics.
- Recording and operating problems may occur on some computer systems. Please note that Panasonic and Panasonic dealers cannot be held liable for any lost audio data or other direct or indirect damage except in cases of intentional or gross negligence.

Includes features for use in conjunction with Dragon, NaturallySpeaking dictation software (sold separately, from Nuance Communications, Inc.). For details on Dragon, NaturallySpeaking, visit the Nuance Communications website:
http://www.nuance.com/dragon/

Troubleshooting guide

Before requesting service, make the following checks. If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, consult your dealer for instructions.

Symptom	Checkpoints
"U01" appears on the display.	• The battery has run down.
No operation.	• Make sure the batteries are correctly inserted. • You cannot operate when the unit is connected to a computer.
Operation is not possible when "hold" appears on the display.	• The Hold function is on (➜ page 5).
"2008" or "2007", "12:00" flashes.	• Set the time (➜ page 11).
"EE:EE" is displayed.	• This can occur after repeatedly recording and deleting files. -Unlock all your files, then delete all folders to remedy this (➜ page19).
Available recording time does not increase correspondingly after deleting files.	
There is no sound from the earphone or it is difficult to hear or noisy.	• Ensure the plug is inserted firmly. • Wipe the plug clean.
Recording stops.	• VAS may be functioning (➜ page 15).
"-- --" appears instead of the recording date.	• Set the time (➜ page 11).
Playback speed is too fast or slow.	• Set the play speed to normal (➜ page 17).
"FULL" appears.	• There are 99 files in the folder. • There is no remaining recording time. -Delete unneeded files (➜ page 19).

Symptom	Checkpoints
No sound from the speaker.	• There is no sound when you have connected earphones.
Cannot delete a file or folder.	• The file is protected (➜ page 19). • The folder is already empty.
Cannot move a file.	• You cannot move files to folders that already contain 99 files. • You cannot move files from folder A, B, C or S to the dictation folder. • You cannot move files from folder S unless the password matches.
Cannot play.	• You tried to play secured files in folder S. You must enter a password set on this unit to play files in folder S (➜ pages 20 and 21).
A recording disappeared.	• Recordings can disappear if the unit receives a shock (e.g. it is dropped), or the batteries go out during recording.
Cannot set timer recording.	• The timer covers 24 hours from the present time only. • You cannot set a recording period longer than 24 hours using the timer. • Set the time (➜ page 11). • You cannot set the timer if there is less than 1 minute of available recording time.
Timer recording does not work.	• The settings are cancelled if the batteries are removed and the clock settings are cleared. • Timer recording does not work if the unit is used for playback or another operation at a set time. • Timer recording setting is canceled once timer recording is performed. Set the timer again when necessary (➜ page 15).
Files created through timer recording are shorter than periods set with the timer.	• VAS may be “On” (➜ page 15).
Cannot use a battery that can be used on other equipment.	• This unit considers the battery as empty even if there is actually power left in it. This is to preserve the clock and other memory items.
Recorded sounds contain noise that makes them difficult to catch.	• Reduce noise (➜ page 16). Noise is reduced and listening becomes easier. Recording in the HQ mode is recommended. (This unit is designed for extended recording of human voice. It is not suited for recording music.)

Troubleshooting guide

Symptom	Checkpoints
Sound is distorted.	• Non-voice recordings such as music on CDs may become distorted in playback.
Sound is distorted when listening to the recording in progress with earphones.	• Keep earphones and the microphone you are using separate.
Message appears when connecting to a computer.	• A message appears when you connect this unit to a computer for the first time. It asks you to enter an authentication key. The key is used for authenticating the unit and the computer.
I hear noises.	• Move the mobile telephone away from this unit when you use the two in the same area.
Voice Editing does not start or does not work correctly.	• Make sure that “PC” is on this unit’s display, and that this unit is recognized as a drive in Voice Editing. Set the USB cable in and out of IC Recorder’s USB jack several times when the unit is not recognized as a drive. • The connection may not work if you connect via a USB hub or a USB extension cable.
I used the “Dictation cord” supplied with the unit, but microphone sensitivity did not improve. Computer voice recognition level is still low.	• Depending on your computer, you may also be able to improve the sensitivity by reversing the “Straight mini plug” and the “L-shaped mini plug” connections.
Cannot successfully convert audio to text with Voice Editing.	• You should use IC Recorder in the dictation recording mode. You can make better recordings for voice recognition in this recording mode (➜ page 7). (Refer to the Voice Editing Operating Instructions (PDF file).)

Sales and Support Information

Customer Care Centre
- For customers within the UK: 0844 844 3582
- For customers within the Republic of Ireland: 01 289 8333
- Visit our website for product information
- E-mail: customer.care@panasonic.co.uk

Technical Support for AV Software
- For UK, ROI:08701 505610

Direct Sales at Panasonic UK
- Order accessory and consumable items for your product with ease and confidence by phoning our Customer Care Centre Monday-Thursday 9:00am-5:30pm, Friday 9:30am-5:30pm (Excluding public holidays).
- Or go on line through our Internet Accessory ordering application at www.panasonic.co.uk.
- Most major credit and debit cards accepted.
- All enquiries transactions and distribution facilities are provided directly by Panasonic UK Ltd.
- It couldn't be simpler!
- Also available through our Internet is direct shopping for a wide range of finished products, take a browse on our website for further details.

Interested in purchasing an extended guarantee?
Please call 0870 240 6284 or visit our website www.panasonic.co.uk/guarantee.

Care and use

To reduce risk of radio interference caused by headphone-, earphone- or microphone cables, only use adequate accessories with the cable length less than 3 m.

■ Unit

- Avoid using or placing this unit near sources of heat.
- To avoid product damage, do not expose this product to rain, water or other liquids.
- The unit's speaker does not have magnetic shielding. Do not place the unit near televisions, personal computers, magnetized cards (bank cards, commuter passes) or other devices easily influenced by a magnet.

■ Batteries

- Do not peel off the covering on batteries and do not use the batteries if the covering has been peeled off.
- Align the poles ⊕ and ⊖ correctly when inserting the batteries.
- Do not mix different types of batteries or old and new batteries.
- Remove the batteries if you do not intend to use the unit for a long time.
- Do not heat or expose to flame.
- Do not leave the batteries in an automobile exposed to direct sunlight for a long period of time with doors and windows closed.
- Do not attempt to recharge dry cell batteries.
- Battery mishandling can cause electrolyte leakage which can damage items the fluid contacts and may cause a fire. If electrolyte leaks from the batteries, consult your dealer. Wash thoroughly with water if electrolyte comes in contact with any part of your body.
- Keep batteries out of reach of children to prevent swallowing.
- When carrying batteries in a pocket or bag, ensure no metal objects such as necklaces are placed together with them. Contact with metal may cause short-circuiting which can cause a fire. For safety, carry the rechargeable batteries in the battery carrying case.

Notice about the rechargeable battery
The battery is designated recyclable.
Please follow your local recycling regulations.

SUOMI
Ladattavaa akkua koskeva huomautus
Akku on määritetty kierrätettäväksi.
Noudata paikallisia kierrätysmääräyksiä.

NORSK
Om det oppladbare batteriet
Batteriet er spesifisert som resirkulerbart.
Vennligst følg de lokale bestemmelsene for resirkulering.

■ Precautions for listening with the Headphones or Earphones

- Do not play your headphones or earphones at a high volume. Hearing experts advise against continuous extended play.
- If you experience a ringing in your ears, reduce volume or discontinue use.
- Do not use while operating a motorized vehicle. It may create a traffic hazard and is illegal in many areas.
- You should use extreme caution or temporarily discontinue use in potentially hazardous situations.
- Even if your headphones or earphones are the open-air type designed to let you hear outside sounds, don't turn up the volume so high that you can't hear what's around you.

■ Allergies

Discontinue use if you experience discomfort with the earphones or any other parts that directly contact your skin.
Continued use may cause rashes or other allergic reactions.

This product may receive radio interference caused by mobile telephones or other products during operation. If such interference is apparent, please increase separation between the product and the mobile telephone or other product.

Maintenance

Do not use such solvents as benzine, paint thinner and alcohol for cleaning.

- Solvents may cause casing to deform and coating to go off.
- Wipe dust and fingerprints off using a soft, dry cloth. Soak the cloth in water, wring it thoroughly and use it for cleaning when the unit is very dirty. Wipe moisture off with a dry cloth after removing tough dirt.
- Do not use kitchen detergents or chemically-enhanced cleaning cloths.

CAUTION
Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer.
Dispose of used batteries according to the manufacturer's instructions.

Specifications

Power requirement: DC 3.0 V (2 AAA size/LR03 batteries)
Power output: 300 mW (max.)
Frequency response: 300 Hz to 5,000 Hz (HQ mode)
300 Hz to 3,400 Hz (FQ/SP mode)
S/N: 37 dB (HQ mode)
Output jack: Earphone, ø 3.5 mm; 0.5 mW 16 Ω
Input jack: Mic, ø 3.5 mm; 0.56 mV plug in power
Speaker: 20 mm 8 Ω
Dimensions (W x H x D):
Max dimensions; 39.3 mm x 105.5 mm x 17.2 mm
Cabinet dimensions; 38.8 mm x 105 mm x 14 mm
Mass:
With dry cell batteries;
Approx. 62 g (RR-US490/RR-US470)/61 g (RR-US455/RR-US450/RR-US430)
Without batteries;
Approx. 39 g (RR-US490/RR-US470)/38 g (RR-US455/RR-US450/RR-US430)
Operational temperature range: 0 °C to 40 °C
Memory capacity (Usable capacity will be less.)**:**
512 MB (RR-US490)/256 MB (RR-US470)/128 MB (RR-US455/RR-US450)/64 MB (RR-US430)
Operating Humidity: 20 % to 80 % (non-condensing)
Battery life: [When used at 25 °C on a flat, stable surface]
The battery life may be less depending on the operating conditions.

Batteries	Recording mode		Playback	Recording
Panasonic alkaline batteries	Monaural	HQ	12 hours	21 hours (When not zoom recording)
		FQ/SP	15 hours	30 hours (When not zoom recording)

• Specifications are subject to change without notice.

-If you see this symbol-

Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)



This symbol on the products and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.
For proper treatment, recovery and recycling, please take these products to designated collection points, where they will be accepted on a free of charge basis.
Alternatively, in some countries you may be able to return your products to your local retailer upon the purchase of an equivalent new product.
Disposing of this product correctly will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest designated collection point.
Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union

This symbol is only valid in the European Union.
If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

ONLY FOR AUSTRALIA/NEW ZEALAND

Panasonic Warranty

1. The product is warranted for 12 months from the date of purchase. Subject to the conditions of this warranty Panasonic or it's Authorised Service Centre will perform necessary service on the product without charge for parts or labour if, in the opinion of Panasonic, the product is found to be faulty within the warranty period.

2. This warranty only applies to Panasonic products purchased in Australia and sold by Panasonic Australia or its Authorised Distributors or Dealers and only where the products are used and serviced within Australia or it's territories. Warranty cover only applies to service carried out by a Panasonic Authorised Service Centre and only if valid proof of purchase is presented when warranty service is requested.

3. This warranty only applies if the product has been installed and used in accordance with the manufacturer's recommendations (as noted in the operating instructions) under normal use and reasonable care (in the opinion of Panasonic). The warranty covers normal domestic use only and does not cover damage, malfunction or failure resulting from use of incorrect voltages, incorrect installation, accident, misuse, neglect, build-up of dirt or dust, abuse, maladjustment of customer controls, mains supply problems, thunderstorm activity, infestation by insects or vermin, tampering or repair by unauthorised persons (including unauthorised alterations), exposure to abnormally corrosive conditions or any foreign object or matter having entered the product.

4. This warranty does not cover the following items unless the fault or defect existed at the time of purchase:
   (a) Video or Audio Tapes
   (b) Video or Audio Heads and Stylii resulting from wear and tear in normal use
   (c) Shaver Heads or Cutters
   (d) Cabinet Parts
   (e) User replaceable Batteries
   (f) Thermal Paper, Toner/Ink Cartridges, Drums, Developer, Film (Ink/Ribbon), Film Cartridge, Printer Heads
   (g) Microwave Oven cook plates.
   (h) Kneader mounting shaft unit (bread bakery)

5. If warranty service is required you should:
   - Telephone Panasonic's Customer Care Centre on 132600 or visit our website and use the Service Centre Locator for the name/address of the nearest Authorised Service Centre.
   - Send or bring the product to a Panasonic Authorised Service Centre together with your proof of purchase receipt as a proof of purchase date. Please note that freight and insurance to and / or from your nearest Authorised Service Centre must be arranged by you.
   - Note that home or pick-up/delivery service is available for the following products in the major metropolitan areas of Australia or the normal operating areas of the nearest Authorised Service Centres:
     (a) Picture tube (CRT) based Television Receivers (screen sizes greater than 66cm); Rear Projection TV's; Plasma/LCD televisions / displays (screen size greater than 103 cm)
     (b) Convection/Combination Microwave Ovens
     (c) Whiteboard (except portable type)

6. The warranties hereby conferred do not extend to, and exclude, any costs associated with the installation, de-installation or re-installation of a product, including costs related to the mounting, de-mounting or remounting of any screen, (and any other ancillary activities), delivery, handling, freighting, transportation or insurance of the product or any part thereof or replacement of and do not extend to, and exclude, any damage or loss occurring by reason of, during, associated with, or related to such installation, de-installation, re-installation or transit.

Panasonic Authorised Service Centres are located in major metropolitan areas and most regional centres of Australia, however, coverage will vary dependant on product. For advice on exact Authorised Service Centre locations for your product, please telephone our Customer Care Centre on 132600 or visit our website and use the Service Centre Locator.

Unless otherwise specified to the consumer the benefits conferred by this express warranty are additional to all other conditions, warranties, guarantees, rights and remedies expressed or implied by the *Trade Practices Act 1974* and similar consumer protection provisions contained in legislation of the States and Territories and all other obligations and liabilities on the part of the manufacturer or supplier and nothing contained herein shall restrict or modify such rights, remedies, obligations or liabilities. *November 2005*

THIS WARRANTY CARD AND THE PURCHASE DOCKET (OR SIMILAR PROOF OF PURCHASE) SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES

If you require assistance regarding warranty conditions or any other enquiries, please visit the Panasonic Australia website

www.panasonic.com.au or by phone on 132 600

If phoning in, please ensure you have your operating instructions available.

Panasonic Australia Pty. Limited

ACN 001 592 187 ABN 83 001 592 187

Locked Bag 505, Frenchs Forest, NSW 2086

www.panasonic.com.au

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Matsushita Electric Industrial Co., Ltd.
Web Site: http://panasonic.net
Pursuant to at the directive 2004/108/EC, article 9(2)
Panasonic Testing Centre
Panasonic Marketing Europe GmbH
Winsbergring 15, 22525 Hamburg, Germany

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