

#### Operating Instructions IC Recorder

Model No. RR-QR270



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. *If you have any questions contact* 1-800-211-PANA(7262)

The warranty can be found on pages 32 and 33.





### Instruction flow chart



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Preparation

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### **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, "200 B" flashes on the display. Set Hold off (→ right) and set the time (→ page 11).



When " 🕼 ; " is displayed, replace the batteries.

### **Before use**



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#### Hold function

Point

Before operating,

switch Hold off,

when finished.

switch Hold on.

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, "hp ld" appears for 2 seconds and the recording or playing display reappears.

When you set Hold on while the unit is stopped, "ha ld" 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.



78 hours 10 minutes

167 hours 40 minutes

FQ (Fine quality)

SP (Standard play)



#### MEETING RECORDING

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



### 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)	
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.

#### **Dictation recording settings**



Part names



 ①Built-in microphone
 ④Stop
 ⑦Erase
 ⑧Hold
 ⑫Headphone/

 ②Recording indicator
 ⑤Display
 ⑧Quick search
 ⑩Speaker
 earphone jack

 ③Record/pause
 ⑥Folder/menu
 dial
 ⑪External microphone jack
 ⑬Battery cover

### How to use the quick search dial



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### List of menus



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.



\*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.

# Preparation

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The clock operates

# Setting the time

When the year is flashing (e.g. "200 f" on the display), begin from step 4.



### Canceling the operation beep



# Recording

#### 

### Using different combinations of recording modes and microphor

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



### **Dictation recording**

As the dictation recording settings are all factory-set, dictation can be recorded quickly and simply.



#### Stop and pause

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

Recording date	<b>→</b>	Recording start time	<b>→</b>	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

#### Listening to the recording in progress

Connect earphones (not included). (Sounds are monaural.) Plug type:  $\emptyset$  3.5 mm (1/8") mini plug

The volume is fixed for recording.



#### Recording through an external microphone

 When you attach an external microphone, the built-in microphone automatically goes off. Plug type: ø 3.5 mm (1/8") monaural mini plug





■ Preventing unnecessary recording (VAS: Voice Activated System) Recording is automatically paused if there is no sound for more than 3 seconds.



confirm.

Turn the function

off when recording

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Moving forward

Tilt the joystick to  $[\triangleright]$ .

Tilt and hold to search ( $\rightarrow$  page 17).

#### Moving backward

Tilt the joystick to  $[\triangleleft]$ .

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 ( $\rightarrow$  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.
- ③ Turn  $[\mathbf{K}/\mathbf{N}]$  to select " $[\frac{1}{10}]$ " and press  $[\mathbf{b}/\mathbf{m}]$  to confirm.
- ●To cancel, select " []- F " in step ③.



# Other playing methods

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

#### Quick search

Turn[**L**/**]** 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  $[ \heartsuit / \triangleright ]$  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  $[\mathbf{L}]$  to select "SPEED" ("SPEED" flashes when selected), press  $[\mathbf{L}]$  to confirm, and then turn  $[\mathbf{L}]$  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.

#### - [ ]/] [2/3] Other playing methods ERASE FOLDER Playing files successively Files stored in the same folder are played successively. Select "ALL" Display Select " []n " Play the menu Press [>/]]. Turn [C/] and 1 Turn [**L**/**]** and Press and hold press [>/] to press [>/] to [•FOLDER/- MENU] confirm confirm for 1 second or @Press [STOP]. longer. Θ Î L ALL REMAIN Un) זה וווונו AMPM

- The unit plays all files in order from the selected one to the last one.
- When the last file finishes, playback stops automatically.
- To cancel, select " [] - " in step 3.

#### Listening with earphones

 $\begin{array}{l} \mbox{Connect earphones (not included).} \\ \mbox{(Sounds are monaural.)} \\ \mbox{Plug type: $\emptyset$ 3.5 mm ($^{1}\!/$^{*}$) mini plug} \end{array}$ 

 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)



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### **Security function**



This unit has a security function.

#### Folder S and password



- Folder S is used to secure files. Once set, a password is necessary for playing files in this folder.
- The <u>password</u> 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.



- I Write down the password in the MEMO space (above) to keep it in memory.
- To initialize the password, select "
- To move among digits, tilt the joystick to  $[\triangleleft/\triangleright]$  in step 4.



#### 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 ( $\rightarrow$  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 " [][F F".

#### How folder S is displayed

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

This security function is only to limit a playback function for files by password, not by encryption. We do not guarantee any kind of loss in case your password gets broken up.

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# Recording to/from a cassette tape

Read the operating instructions for the connected equipment.

#### Recording to a cassette tape recorder etc.



Adjust the recording volume on the source to the desired level.

# **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, refer to "Customer Services Directory" (→ page 33).

Symptom	Checkpoints			
"U01" appears on the display.	The battery has run down.			
No operation.	<ul> <li>Make sure the batteries are correctly inserted.</li> </ul>			
Operation is not possible when "hold" appears on the display.	<ul> <li>The Hold function is on (→ pages 4 and 5).</li> </ul>			
"2008", "12:00" flashes.	• Set the time. (-> page 11)			
"EE:EE" is displayed.	This can occur after repeatedly recording and deleting files.			
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.	<ul><li>Ensure the plug is inserted firmly.</li><li>Wipe the plug clean.</li></ul>			
Recording stops.	<ul> <li>VAS may be functioning (→ page 15).</li> </ul>			
"" appears instead of the recording date.	<ul> <li>Set the time (→ page 11).</li> </ul>			
Playback speed is too fast or slow.	<ul> <li>Set the play speed to normal (→ page 17).</li> </ul>			
A recording disappeared.	<ul> <li>Recordings can disappear if the unit receives a shock (e.g. it is dropped), or the batteries go out during recording.</li> </ul>			

### **Troubleshooting guide**

Symptom	Checkpoints
"FULL" appears.	<ul> <li>There are 99 files in the folder.</li> <li>There is no remaining recording time.</li> <li>-Delete unneeded files. (→ page 19)</li> </ul>
No sound from the speaker.	There is no sound when you have connected earphones.
Cannot delete a file or folder.	<ul> <li>The file is protected (&gt; page 19).</li> <li>The folder is already empty.</li> </ul>
Cannot move a file.	<ul> <li>You cannot move files to folders that already contain 99 files.</li> <li>You cannot move files from folder A, B, C or S to the dictation folder.</li> <li>You cannot move files from folder S unless the password matches.</li> </ul>
Cannot play	<ul> <li>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).</li> </ul>
Cannot set timer recording.	<ul> <li>The timer covers 24 hours from the present time only.</li> <li>You cannot set a recording period longer than 24 hours using the timer.</li> <li>Set the time (→ page 11).</li> <li>You cannot set the timer if there is less than 1 minute of available recording time.</li> </ul>
Timer recording does not work.	<ul> <li>The settings are cancelled if the batteries are removed and the clock settings are cleared.</li> <li>Timer recording does not work if the unit is used for playback or another operation at a set time.</li> <li>Timer recording setting is canceled once timer recording is performed. Set the timer again when necessary (→ page 15).</li> </ul>

Symptom	Checkpoints
Files created through timer recording are shorter than periods set with the timer.	<ul> <li>VAS may be "On" (→ page 15).</li> </ul>
Cannot use a battery that can be still used on other equipment.	<ul> <li>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.</li> </ul>
Recorded sounds contain noise that makes them difficult to catch.	<ul> <li>Reduce noise (         page 16). Noise is reduced and listening may become 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.)</li> </ul>
Sound is distorted.	<ul> <li>Non-voice recordings such as music on CDs may become distorted in playback.</li> </ul>
Howling occurs when listening to the recording in progress with the earphones.	<ul> <li>Keep the earphones and the microphone you are using separate.</li> </ul>
I hear noises.	<ul> <li>Move the mobile telephone away from this unit when you use the two in the same area.</li> </ul>

### **Specifications**

Power requirement: Speaker output: Frequency response:	DC 3.0 V (2 AAA size/LR03 batteries) 300 mW (max.) 300 Hz to 5,000 Hz (HQ mode) 300 Hz to 3,400 Hz (FQ mode) 300 Hz to 2,700 Hz (SP mode)
Built-in Microphone S/N Ratio:	37 dB (HQ mode)
Output jack:	Earphone, ø 3.5 mm ( <sup>1</sup> / $s$ "); 0.5 mW (max.) 16 $\Omega$
Input jack:	Mic, ø 3.5 mm (1/8"); 0.56 mV plug in power
Speaker:	ø 20 mm ( <sup>25</sup> /32") 8 Ω
Dimensions (W x H x D):	
Max dimensions;	39.3 mm x 105.5 mm x 17.2 mm (1-9/16" x 4-5/32" x 11/16")
Cabinet dimensions;	38.8 mm x 105.0 mm x 14.0 mm (1- <sup>17</sup> /32" x 4- <sup>1</sup> /8" x <sup>9</sup> /16")
Mass (Weight):	
With drycell batteries;	Approx. 60.0 g (2.09 oz.)
Without batteries;	Approx. 37.0 g (1.29 oz.)
Memory capacity (MB means one million b	
Operational temperature range:	0 °C to 40 °C (32 °F to 104 °F)
Operating Humidity:	20 % to 80 % (non-condensing)
Battery life:	[When used at 25 °C (77 °F) 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
		FQ/SP	15 hours	30 hours

• Specifications are subject to change without notice.

Product Identification Marking is located on the bottom of unit.

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### Maintenance

#### Clean this unit with a dry and soft cloth.

- If the unit becomes too dirty, wring a cloth moistened in water, wipe the dirt with it and clean with a dry cloth.
- Do not use solvents including benzene, thinner, alcohol, kitchen detergent, a chemical wiper, etc. This might cause the exterior case to be deformed or the coating to come off.

#### -If you see this symbol-

#### 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.

#### 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.

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.

### 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 (9.8 ft).

#### 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.
- $\bullet$  Align the poles  $\oplus$  and  $\ominus$  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.

#### 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.

#### Listening caution





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.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing.

Guard against this by setting your equipment at a safe level BEFORE your hearing adapts. To establish a safe level:

- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

Once you have established a comfortable sound level:

• Leave it there.

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### **Product Service**

- 1. Damage requiring service The unit should be serviced by qualified service personnel if:
  - (a) Objects or liquids have gotten into the unit; or
  - (b) The unit has been exposed to rain; or
  - (c) The unit does not operate normally or exhibits a marked change in performance; or
  - (d) The unit has been dropped or the cabinet damaged.
- **2. Servicing** Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.
- **3. Replacement parts** When parts need replacing ensure the servicer uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock, or other hazards.
- Safety check After repairs or service, ask the servicer to perform safety checks to confirm that the unit is in proper working condition.

#### **Product information**

For product information or assistance with product operation:

Refer to "Customer Services Directory" (-> page 33).

For assistance in the continental U.S.A. in obtaining repairs please ship the product to: Panasonic Service and Technology Company- Customer Servicenter

Suite B 4900 George McVay Drive McAllen, TX 78503

In Puerto Rico contact the Panasonic Puerto Rico, Inc. Tel. (787) 750-4300 Fax. (787) 768-2910

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When shipping the unit carefully pack and send it prepaid, adequately insured and preferably in the original carton. Include a letter detailing the complaint and provide a day time phone number where you can be reached.

#### IF REPAIR IS NEEDED DURING THE WARRANTY PERIOD THE PURCHASER WILL BE REQUIRED TO FURNISH A SALES RECEIPT/PROOF OF PURCHASE INDICATING DATE OF PURCHASE, AMOUNT PAID AND PLACE OF PURCHASE, CUSTOMER WILL BE CHARGED FOR THE REPAIR OF ANY UNIT RECEIVED WITHOUT SUCH PROOF OF PURCHASE.

Also, the purchaser will be responsible for shipping the unit to the address on page 30.

The serial number of this product can be found
on either the back or the bottom of the unit.
Please note them in the space provided below
and keep for future reference.

MODEL NUMBER

**RR-QR270** 

SERIAL NUMBER

User memo:

DATE OF PURCHASE

DEALER NAME

DEALER ADDRESS

TELEPHONE NUMBER

### **Limited Warranty**

Panasonic Consumer Electronics Company, Division of Panasonic Corporation of North America One Panasonic Way Secaucus, New Jersey 07094

### Panasonic Portable Audio Products Limited Warranty

#### Limited Warranty Coverage

If your product does not work properly because of a defect in materials or workmanship, Panasonic Consumer Electronics Company or Panasonic Puerto Rico, Inc. (collectively referred to as "the warrantor") will, for the length of the period indicated on the chart below, which starts with the date of original purchase ("warranty period"), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

Product or Part Name	Parts	Labor
All Portable Audio Products except item listed below	One (1) Year	One (1) Year
Rechargeable batteries (in exchange for defective item)	Ten (10) Days	Not applicable

During the "Labor" warranty period there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. This Limited Warranty excludes both parts and labor for batteries, antennas, and cosmetic parts (cabinet). This warranty only applies to products purchased and serviced in the United States or Puerto Rico. This warranty is extended only to the original purchaser of a new product which was not sold "as is".

#### Mail-In Service

Panasonic Puerto Rico, Inc.

Ave. 65 de Infantería. Km. 9.5

For assistance in the continental U.S.A. in obtaining repairs please ship the product to:

San Gabriel Industrial Park, Carolina, Puerto Rico 00985

Panasonic Service and Technology Company Customer Servicenter Suite B 4900 George McVay Drive McAllen, TX 78503

For assistance in Puerto Rico call Panasonic Puerto Rico, Inc. (787)-750-4300 or fax (787)-768-2910.

When shipping the unit carefully pack and send it prepaid, adequately insured and preferably in the original carton. Include a letter detailing the complaint and provide a day time phone number where you can be reached.

IF REPAIR IS NEEDED DURING THE WARRANTY PERIOD THE PURCHASER WILL BE REQUIRED TO FURNISH A SALES RECEIPT/PROOF OF PURCHASE INDICATING DATE OF PURCHASE. AMOUNT PAID AND PLACE OF PURCHASE. CUSTOMER WILL BE CHARGED FOR THE REPAIR OF ANY UNIT RECEIVED WITHOUT SUCH PROOF OF PURCHASE.

#### Limited Warranty Limits And Exclusions

This warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments. misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, introduction of sand, humidity or liquids, commercial use such as hotel, office, restaurant, or other business or rental use of the product, or service by anyone other than a Factory Servicenter or other Authorized Servicer, or damage that is attributable to acts of God.

#### THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE".

THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT. OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. (As examples, this excludes damages for lost time, travel to and from the servicer, loss of or damage to media or images, data or other memory or recorded content. The items listed are not exclusive, but are for illustration only.)

#### ALL EXPRESS AND IMPLIED WARRANTIES. INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE LIMITED WARBANTY.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the exclusions may not apply to you.

#### Service in Puerto Rico

Panasonic Puerto Rico. Inc. Ave. 65 de Infantería, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985 Phone (787)750-4300. Fax (787)768-2910

This warranty gives you specific legal rights and you may also have other rights which vary from state to state. If a problem with this product develops during or after the warranty period, you may contact your dealer or Servicenter. If the problem is not handled to your satisfaction, then write to the warrantor's Consumer Affairs Department at the addresses listed for the warrantor.

PARTS AND SERVICE. WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY, ARE YOUR RESPONSIBILITY.

#### Customer Services Directory

Obtain Product Information and Operating Assistance; locate your nearest Dealer or Servicenter; purchase Parts and Accessories: or make Customer Service and Literature requests by visiting our Web Site at:

http://www.panasonic.com/consumersupport

or, contact us via the web at:

http://www.panasonic.com/contactinfo You may also contact us directly at:

1-800-211-PANA (7262).

Monday-Friday 9 am-9 pm; Saturday-Sunday 10 am-7 pm, EST.

For hearing or speech impaired TTY users, TTY: 1-877-833-8855

#### Accessory Purchases

Purchase Parts, Accessories and Instruction Books online for all Panasonic Products by visiting our Web Site at: http://www.pstc.panasonic.com or, send your request by E-mail to: npcparts@us.panasonic.com You may also contact us directly at: 1-800-332-5368 (Phone) 1-800-237-9080 (Fax Only) (Monday - Friday 9 am to 9 pm, EST.) Panasonic Service and Technology Company 20421 84th Avenue South, Kent, WA 98032 (We Accept Visa, MasterCard, Discover Card, American Express, and Personal Checks)

For hearing or speech impaired TTY users, TTY: 1-866-605-1277

### MEMO

#### FCC Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential 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. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more 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 the dealer or an experienced radio/TV technician for help.

Any unauthorized changes or modifications to this equipment would void the user's authority to operate this device.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible Party: Panasonic Corporation of North America One Panasonic Way Secaucus, NJ 07094 Support Contact: Panasonic Consumer Electronics Company

Telephone No.: 1-800-211-(PANA) 7262

#### Panasonic Consumer Electronics Company, Division of Panasonic Corporation of North America

One Panasonic Way Secaucus, New Jersey 07094

#### http://www.panasonic.com

#### Panasonic Puerto Rico, Inc.

Ave. 65 de Infantería, Km. 9.5 San Gabriel Industrial Park, Carolina, Puerto Rico 00985

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