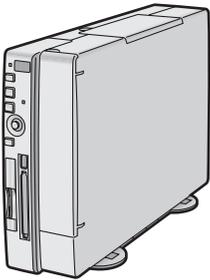


Panasonic®

Digital Photo Printer

Operating Instructions

Model No. **SV-AP10U**



MultiMediaCard™

Exif Print

Before use, please read these instructions completely.
Please retain this manual for continuing reference.

For USA assistance, please call: 1-800-211-PANA(7262) or send e-mail to: consumerproducts@panasonic.com

For Canadian assistance, please call: 1-800-561-5505 or visit us at www.panasonic.ca

VQT0B55

Information for Your Safety

WARNING

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD AND ANNOYING INTERFERENCE, USE ONLY THE RECOMMENDED ACCESSORIES AND DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE. DO NOT REMOVE THE COVER (OR BACK); THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

- As this equipment gets hot during use, operate it in a well-ventilated place; do not install this equipment in a confined space such as a book case or similar unit.
- Do not open the Ink Cassette Side Cover while printing is in progress. Your fingers could be pinched between the thermal head arms and the Ink Cassette.

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- Other names, company names, and product names printed in these instructions are trademarks or registered trademarks of the companies concerned.
- Avoid using a cell phone near the Photo Printer because doing so may cause noise to adversely affect the picture.

Before opening the CD-ROM package, please read the following.

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Important Information

FCC Note: (U.S. only)

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.

FCC Caution: To assure continued compliance, follow the attached installation instructions and use only shielded interface cables with ferrite core when connecting to computer or peripheral devices.

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

Trade Name:	Panasonic
Model No.:	SV-AP10U
Responsible party:	Matsushita Electric Corporation of America One Panasonic Way, Secaucus, NJ 07094
Support Contact:	Panasonic Consumer Electronics Company 1-800-211-PANA(7262)

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.

This Class B digital apparatus complies with Canadian ICES-003.

The Preheat function works so that high picture quality is maintained when the surrounding temperature is low. Therefore, even if pressing the [PRINT] button, the operation may not start for a while. (Printing starts within about 1 minute automatically.)

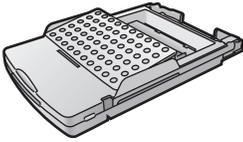
If the temperature of the main unit increases when performing multiple copying, printing pauses automatically to lower the temperature and the printing time becomes longer. However, this is not a malfunction with the product.

- In the case of printing when using a personal computer, the message [Please wait until the temperature of printer decreases.] is displayed on the monitor of the personal computer.
- In the case of printing with using a memory card, the message [Please wait until the temperature decreases.] is displayed on the monitor of a TV.

When using the Photo Printer with a PC Card (Especially Hard Disk Type card), temperature on the surface of the card may rise and it may become hot. Turn off the power and remove the card after a while.

Supplied Accessories

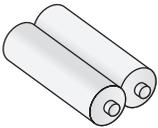
Paper Cassette (VXA7602)



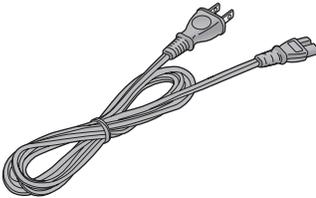
Remote Controller (N2QADB000006)



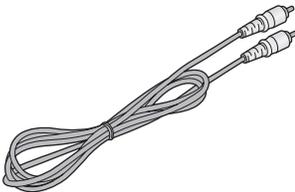
AA Size Batteries (x2)



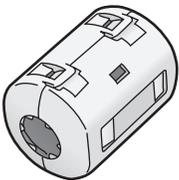
AC Power Cord (K2CA2EA00002)



Video Cable (K1EA02BA0001)



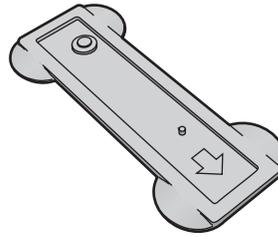
Clamp Filter (x2) (Large Size)(for AC Power Cord and optional USB Connection Cable)
(J0KG00000053)



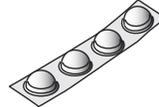
Clamp Filter (x1) (Small Size)(for Video Cable)
(J0KG00000036)



Stand for Vertical Layout (VYQ2551)



Feet for Horizontal Layout (VKA0376)



CD-ROM (VFF0170)



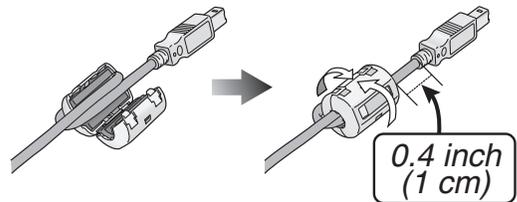
Important Information

(Including USB Connection Cable (not supplied))

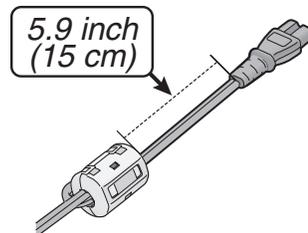
In order to prevent electromagnetic interference, install the Clamp Filter (supplied) on the Cable as shown in the figure below.

- After passing the Cable through the Clamp Filter and looping it around once, close the Clamp Filter until it clicks into place.
- When you attach the Clamp Filter be sure to attach it near the side of the Cable connected to the main unit.

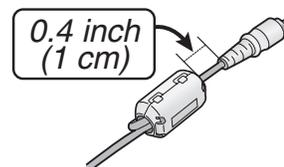
USB Connection Cable (Not supplied)



AC Power Cord (Supplied)



Video Cable (Supplied)



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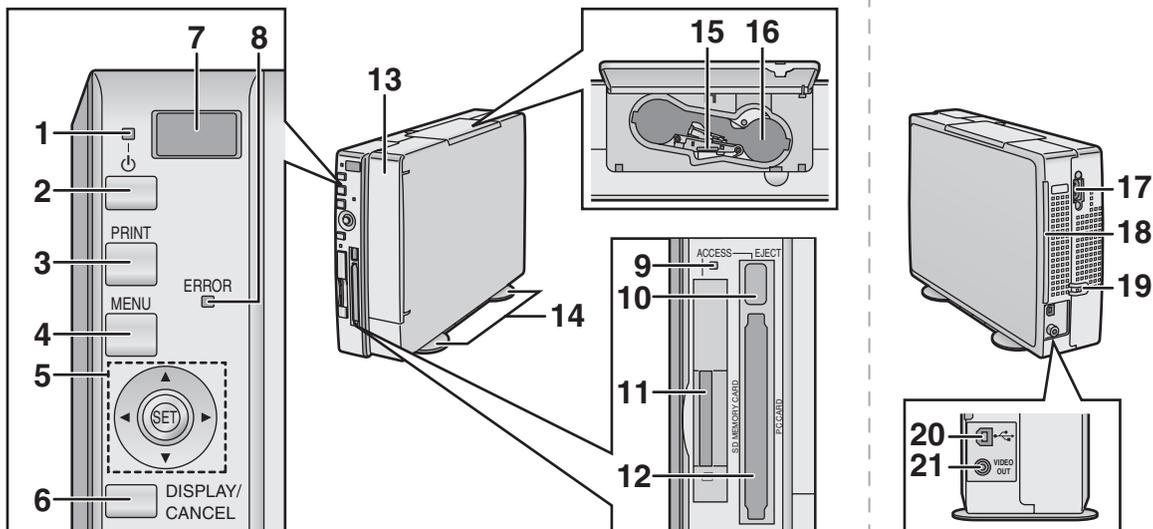
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Preparation

Controls and Components

- 1 Power Lamp** [⬆]

When you turn the power on, the Power lamp turns green. When you turn the power off, the Power lamp turns red, and all images in the Photo Printer's memory are deleted.
- 2 Power Button** [⬆]

Press to turn Photo Printer on/off.
- 3 PRINT Button**

Press this button to print images.
- 4 MENU Button**

Use this button to display the menu screen.
- 5 ◀▶▲▼ Buttons/SET Button**

◀▶▲▼ Buttons:
Use these buttons to select menu choices and card images.

SET Button:
Use this button to enter various selections.
- 6 DISPLAY/CANCEL Button**

DISPLAY Button:
Changes the picture display on a card among a Single Screen Display, an Index Display and an Album Display.

CANCEL Button:
Use to cancel printing and other such processes.
Use to exit MENU.
- 7 Remote Control Receiver**

Receives the signal from the remote controller. Do not obstruct the remote control receiver in order to avoid difficulties using the remote.
- 8 Error Lamp**

Flashes when an error has occurred.

9 Card Access Lamp

Lights while the Photo Printer is accessing data on the Card.

10 PC Card Eject Button

11 SD Memory Card/MultiMediaCard Insert Location

12 PC Card Insert Location

13 Paper Cassette Insert Location

14 Stand for Vertical Layout

Use the stand for vertical layout.

15 Ink Cassette Eject Lever

16 Ink Cassette Insert Location

17 Power Socket

Connects the AC Power Cord (supplied).

18 Paper Removal Port

19 Cord Stopper

Fixes the AC Power Cord.

20 USB Socket

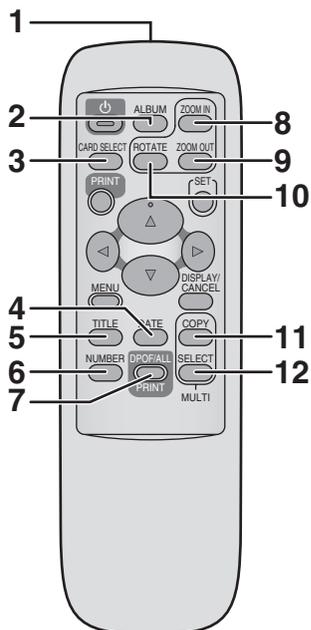
Connects the USB Connection Cable (not supplied) to the USB Socket for PC.

21 VIDEO OUT Socket

Connect the Video Cable (supplied) to Video Input Terminal of TV.

Controls and Components (Cont.)

Remote Controller



11 MULTI (COPY) Button

Press this button to select numbers of multiple screen shots of the same picture.

12 MULTI (SELECT) Button

Press this button to select numbers of multiple screen shots of different pictures.

The buttons below have the same functions as ones of the Photo Printer. (The same numbers as the main unit are used.)

2 Power Button [⏻], 3 PRINT Button, 4 MENU Button, 5 ◀▶▲▼ Buttons, 5 SET Button, and 6 DISPLAY/CANCEL Button

1 Remote Control Transmitter

2 ALBUM Button

Press this button to change the screen between the Album Display and Index Display.

3 CARD SELECT Button

Press this button to change the input between SD Memory Card or MultiMediaCard and PC Card.

4 DATE Button

Press this button to add the date when the picture was taken in the lower right corner.

5 TITLE Button

Press this button to display the menu screen of [FUNCTION].

6 NUMBER Button

Press this button to select the copies to print.

7 PRINT (DPOF)/PRINT (ALL) Button

PRINT (DPOF) Button:

Press this button to print the pictures that were marked for DPOF.

PRINT (ALL) Button:

Prints all pictures when there are no pictures indicated with DPOF setting.

8 ZOOM IN Button

Press this button to enlarge the picture and characters.

9 ZOOM OUT Button

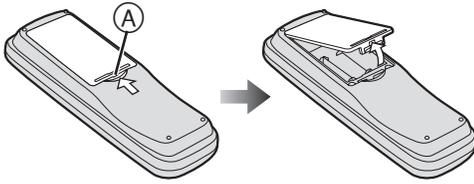
Press this button to reduce the picture and characters.

10 ROTATE Button

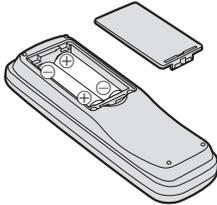
Press this button to rotate the picture and characters.

Inserting Remote Control Batteries

- 1 While pressing the indentation (A) in the direction indicated by the arrow, lift the cover up.



- 2 Insert the batteries (supplied) with the polarity (+ and -) correctly aligned.



- 3 Cover is returned.

Precautions for Battery Replacement

The service life of the batteries is approximately 1 year. However, it varies considerably depending on the frequency of use.

- When they are exhausted, replace them with two AA, UM3, or R6 size batteries.
- When the batteries are exhausted, remove them immediately and dispose of them correctly.
- Make sure that the batteries are inserted with the polarity (+ and -) correctly aligned.
- Do not mix old battery with new battery.
- Do not mix different battery types, i.e. Alkaline and Manganese.
- Do not use rechargeable (Ni-Cd) batteries.
- Do not heat or short-circuit the batteries.
- When you do not use the remote control for a long time, take out the batteries and store them in a cool, dry place.

CAUTION

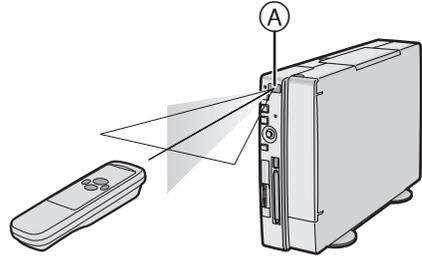
Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the manufacturer.

Dispose of used batteries according to the manufacturer's instructions.

Using the Remote Controller

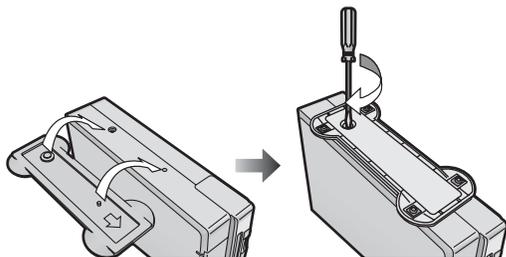
- 1 Direct the remote controller at the remote control receiver (A) and press a button on the remote controller.



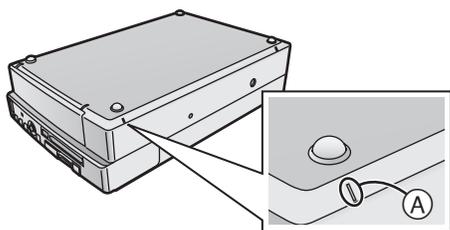
- Distance from the Photo Printer: Within approximately 23 feet (7 m)
- Angle: Within approximately 40 degrees in the vertical direction and 60 degrees in the horizontal direction from the central axis
- Do not put an the obstruction between the Photo Printer and remote controller.
- Do not expose the remote control receiver to direct sunlight or strong light.
- When attaching the paper cassette, you cannot use the remote controller from the right angle or lower right angle.
- The receiver range reverses between the Vertical and Horizontal layout.

Insertion

Vertical Layout

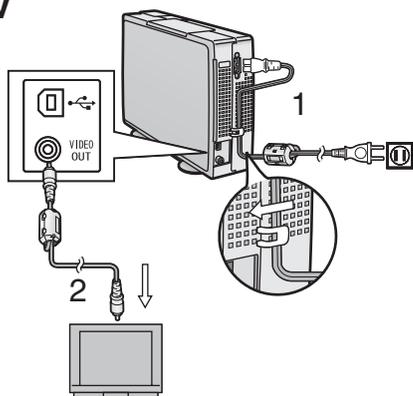


Horizontal Layout

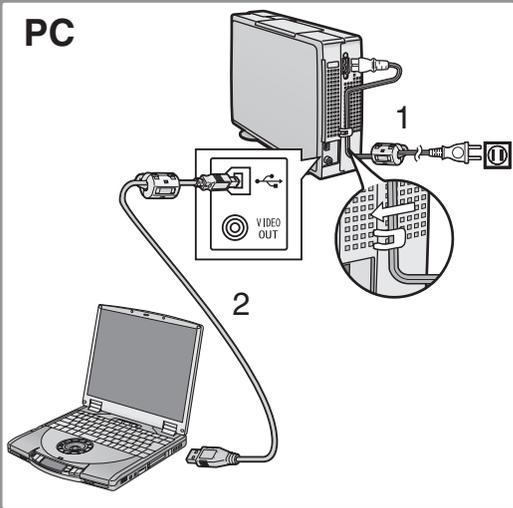


Connections

TV



PC



Insertion and Connections

Insertion

Be sure to insert the stand when selecting the Vertical layout and the feet when selecting the Horizontal layout.

Insertion for Vertical Layout

- 1 Insert the stand into the holes as shown in the illustration.
- 2 Tighten the screw to join the main unit and the stand.

Insertion for Horizontal Layout

- 1 Attach the feet for Horizontal Layout to the four corners of the side which does not have a vent on the main unit. (Attach them to the position of mark (A).)

- When detaching the feet, coating may be peeled off. Do not detach them after attaching them.
- Select [Vertical] or [Horizontal] under [Layout] after Insertion and connections. (Initial setting: [Vertical])
- If you do not select the [Layout] menu, the direction of operation of the Cursor buttons will be different when using with the Horizontal layout.

Precautions During Setup

As this printer gets hot during use, operate it in a well ventilated area. Place printer at least 4" (10 cm) away from any walls to the left, right, above or rear of printer. Do not place any objects on top of printer.

Connections

For Connection to TV

- 1 Connect the AC Power Cord (supplied) with the main unit and AC outlet with the cord hooked to the cord stopper.
 - 2 Connect the Video cable (supplied) to [VIDEO OUT] Socket on main unit and the Video Input Socket on TV.
- After connections, turn on the Photo Printer and TV, and switch the input to the video input.

For Connection to PC

- 1 Connect the AC Power Cord (supplied) with the main unit and AC outlet with the cord hooked to the cord stopper.
 - 2 Connect the USB Connection Cable (not supplied) to the USB Socket on main unit and the USB Socket on PC.
- You can purchase a generic USB A-B cable to use with this product at many consumer electronic retail outlets.
 - After connections, see page 31.

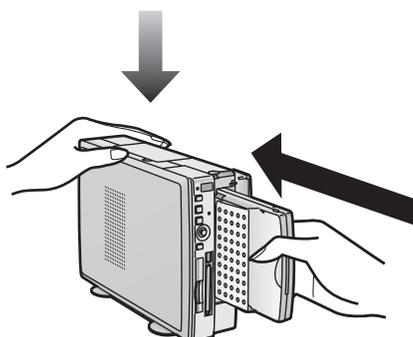
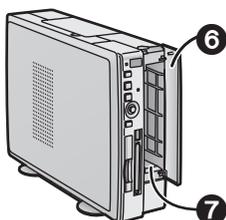
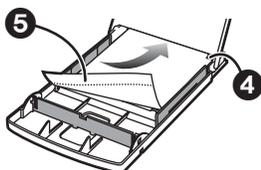
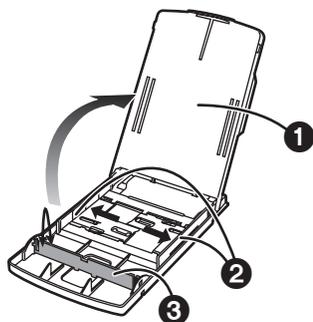
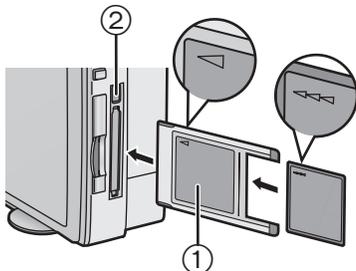
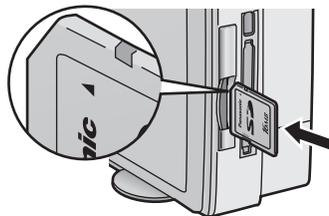
THE SOCKET OUTLET SHALL BE INSTALLED NEAR THE EQUIPMENT AND SHALL BE EASILY ACCESSIBLE.

Paper That Can Be Used For Printing

The Photo Printer can use the following types of paper. Use Ink Cassette/Paper Sets that bear the mark. (Print Sets that bear the mark, the mark, or no mark at all cannot be used.)

- 4" x 5-7/8" (100 x 148 mm) printing paper* **with borders**: The Ink Cassette/Paper Set VW-APA50U is required.
- 16 Pre-Cut Adhesive paper (overcoat type): The Ink Cassette/Paper Set VW-APASD16U is required.
- 4" x 6" (100 x 150 mm) printing paper* (overcoat type) **without borders**: The Ink Cassette/Paper Set VW-APKC36U is required.

- Use the Ink Cassette with the paper provided in the same box.



Inserting a Card

When using an SD Memory Card or a MultiMediaCard

- 1 Insert the card all the way into the slot.

- The Card Access Lamp lights.

[Removing the Card]

- 1 Push the card.
- 2 Remove the card.

When Using a PC Card

- 1 Insert CF Card all the way into ① (PC Card Adaptor/Product Sold Separately).

- 2 Insert ① into the Photo Printer.

[When Removing the Card Adaptor]

- 1 Press ②.
- 2 Remove ①.

- Never take the card out or turn off the power while the card is being accessed. This could damage the format of the card and make it unusable.

- Insert/remove cards only when the power is off.

- Card images are formatted as JPEG baselines (JFIF, EXIF, DCF [Design rule for Camera File system], CIFF, SISRIF) TIFF (Baseline TIFF Rev.6.0RGB Full Color Images compatible).

- The following types of cards can be used:

- Compact Flash, IBM Microdrive, Memory Stick and Smart Media.

- Do not insert/remove the card with the card adaptor inserted.

Inserting Paper

- 1 Open the lid of the paper cassette (included) ①, spread out ②, and stand up (or push down) ③.

- When using 4" x 5-7/8" (100 x 148 mm) printing paper or 16 Pre-Cut Adhesive printing paper, spread ②, and stand up ③.

- When using 4" x 6" (100 x 150 mm) printing paper, spread ②, and push down ③.

- 2 Face the white (print) side of the paper up, and insert under ④ (⑤ is the perforation line).

- 3 While opening the paper cassette door ⑥ and pushing the Photo Printer with your hand, insert the paper cassette all the way into ⑦.

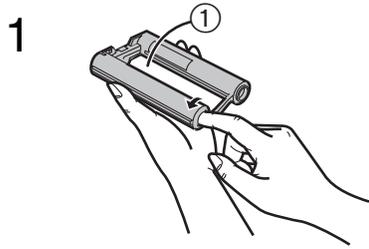
- Insert up to 25 sheets of 4" x 5-7/8" (100 x 148 mm) printing paper, or up to 36 sheets of the other types of paper.

- Do not pull out the paper cassette during printing.

- Pull out the paper cassette and close the paper cassette door after use.

- Do not fold, bend, or turn paper upside down when inserting into printer.

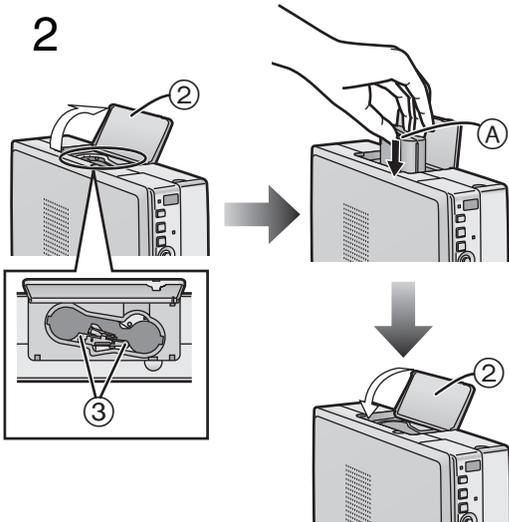
- If you do not insert the paper cassette all the way, when pressing the [PRINT] button, the error message [There is no paper cassette] will be displayed on the monitor connected to the unit.



Inserting the Ink Cassette

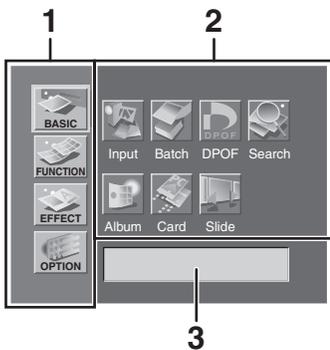
- 1 Use your finger to push in the hole with the arrow, and turn it in the direction of the arrow.
Tighten any slack in ① (Ink Film).
 - The Ink Cassette is included in the Ink Cassette/Paper Set (optional).
- 2 Open ② (Ink Cassette Compartment Door), place the side that contains ③ (small hole in Ink Cassette ①) up, insert the Ink Film all the way into the Ink Cassette, and close ②.

- Do not touch the Ink Film in the Ink Cassette, and do not pull it out of the cassette.
- Close the Ink Cassette Compartment Door.
- Do not peel off the label on the Ink Cassette.
- When all of the Ink film in an Ink Cassette has been used up, replace the Ink Cassette with a new one. **Used Ink Cassettes cannot be reused.**



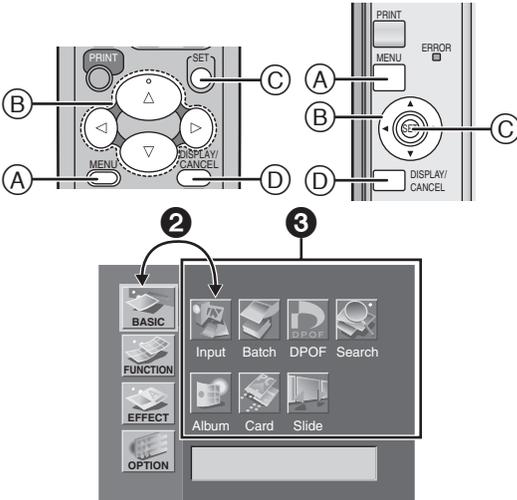
MENU Interface

- 1 **MENU Categories**
The Photo Printer is divided into 4 major categories.
- 2 **MENU Contents**
Select the specific MENU you desire here.
- 3 **Description/Control Display**
The selected MENU's description as well as control confirmation messages are displayed in this area.



MENU Controls

Use the MENU Mode as follows.

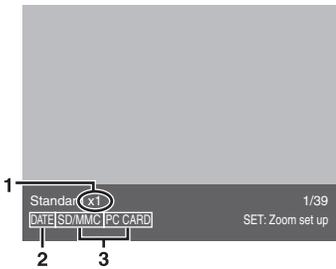


- ❶: Press (A) to display the MENU screen.
- ❷: Use the ◀▶ Buttons (B) to switch between MENU categories and MENU contents.
- ❸: Use the ▲▼ Buttons (B) to move within the MENU Contents. To enter your selection, press (C).
- ❹: Press (C) to enter your selection.
- ❺: Press (D) to exit the MENU.

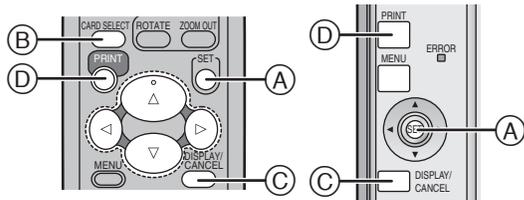
On Screen Display

The screen display disappears after a few seconds, but appears again when pressing the ▲▼ Buttons.

- 1 Number display
- 2 Date display
- 3 Input display



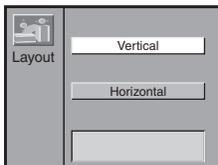
Basic Functions



1



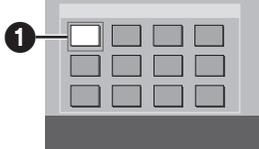
2



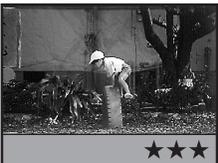
4



5



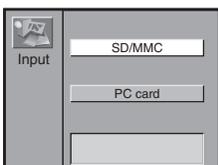
6



3



4



Test Print

- The explanations below are made for the Vertical layout and the Album Display setting.

Printing Images From a Card

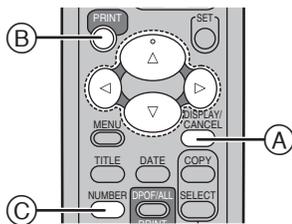
- Make sure that the paper, the Paper Cassette and the Ink Cassette are all inserted.
- Insert a card into the Photo Printer.
- Turn on the power.

- Select [Layout] under [OPTION] on the MENU screen, and press **A** (SET Button).
- Select [Vertical] or [Horizontal], and press **A**.
- Press **B** (CARD SELECT Button).
- Using the **◀▶** Buttons, select the date you wish.
Selected date: Yellow
Date with the picture: Light Blue
- Using **C** (DISPLAY Button), change to the Index Display and using the **◀▶▲▼** Buttons, align **1** (blue frame) over the image you wish to print.
 - You can enlarge, reduce and rotate the picture here. (P15)
- Pressing **C** changes to a Single Screen Display.
- Press **D** (PRINT Button).
 - Printing begins.
 - The "—" symbols all change to "★" symbols. Once they disappear, printing is complete.

To Operate with the Buttons on the main unit

- Select [Layout] under [OPTION] on the MENU screen, and press **A** (SET Button).
- Select [Vertical] or [Horizontal], and press **A**.
- Select [Input] under [BASIC] on the MENU screen, and press **A** (SET Button).
- Using the **▲▼** Buttons, select [SD/MMC] or [PC card], and press **A** (SET Button).
 - Go to Step 5 on the operations with the remote controller after the operations above.

- Some images on the display may be unsteady depending on the card being used. If "The picture is unreadable." or "The card can't be used." error message appears, or if an "x" symbol appears even though the image is stored, turn off the power, remove the card and re-insert it.
- A white border may appear around the card's image, but this will not affect the printed image.
- Do not pull out the paper when moving during printing. Do not remove the paper cassette or the Ink Cassette.
- Do not leave 11 or more printing papers on the receiving position to avoid causing a paper jam.
- It may take some time until the picture is displayed depending on the card.
- The picture on the TV screen may flicker depending on the card. However it does not affect the printing of the image.
- When saving the picture file on PC, the saved date is displayed.
- It may take longer to print two or more sheets or print in low or high temperatures.



Forwarding/Reversing the Screen

When 13 or more images are recorded on a card, using the ◀▶▲▼ Buttons, aligning ① (blue frame) on the places indicated in the diagram to the left and pressing the ◀▶▲▼ Buttons will forward/reverse the screen.

Reprinting the Image

Press ① to make the Index Display appear after printing is complete and the Album Display appears and then press the PRINT Button ② after selecting the picture in the blue frame.

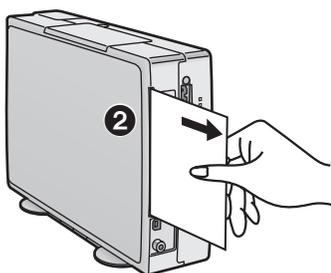
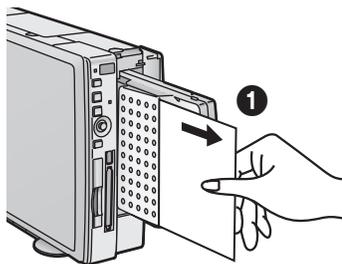
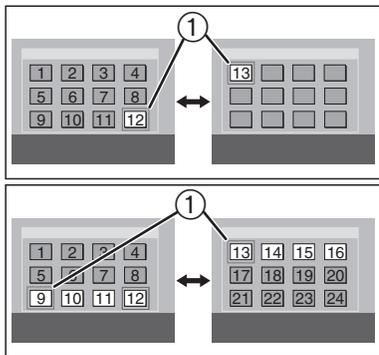
- If inserting a different Ink Cassette before reprinting when using a card, re-select the image.

Printing Multiple Copies of a Single Image

1 Press ③ (NUMBER Button) when the picture is displayed.

- The number of prints increases when pressing ③.
- The Photo Printer can continuously print up to 10 copies of the same image.
- The number of pages remaining to be printed (including the currently printing page) appears in the lower left corner of the screen.

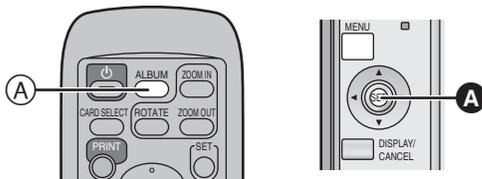
To Operate with the Buttons on the main unit
See page 29.



Paper Jams

- If a "Paper jam has occurred. Remove paper and press [PRINT]" error message appears. Remove paper out of the left side ① or the right side ②, and remove the Ink Cassette. Make sure no more paper is stuck inside, then re-insert the Ink Cassette. Press the Print button. The error message will disappear and printing will continue.
- If you have trouble removing the paper, turn the power off, and then back on again. Proceed to remove the paper from either ① or ②.
- If the paper stops moving during print even though no error messages appear, do not remove the paper. Wait for printing to resume automatically.

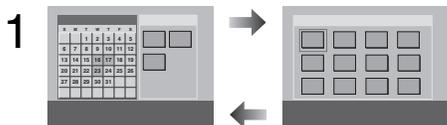
Switching the Pictures between the Album Display and the Index Display



You can display the pictures where a date has been recorded in the Album Display.

1 Press (A) (ALBUM Button) when the pictures are displayed.

- The pictures can be also switched between the Album Display and the Index Display when pressing (A).



1

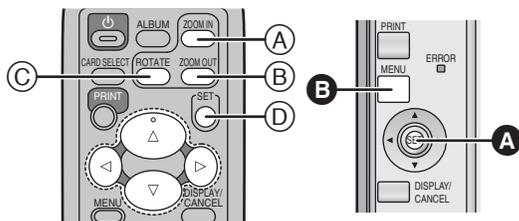
To Operate with the Buttons on the main unit
1 Select [Album] under [BASIC] on the MENU screen, and press (A).

2 Using the ▲▼ Buttons, select [Indicate] or [Don't indicate], and press (A).

2



- When saving the picture file on PC, the saved date is displayed.



To Enlarge/Reduce/Rotate/Move the Picture

- Select the INPUT method.
- Make the picture appear in the Single Screen Display.

1 Press (A) (ZOOM IN Button) to enlarge the picture.

- The picture can be enlarged up to 3 times.

2 Press (B) (ZOOM OUT Button) to reduce the picture.

- The picture can be reduced up to 1/2 the size.

3 Press (C) (ROTATE Button) to rotate the picture.

- The picture can be rotated by 90 degrees clockwise whenever the button is pressed.

4 Using the ◀▶▲▼ Buttons, move the picture after enlarging/reducing/rotating or pressing (D).



To Operate with the Buttons on the main unit

1 Press (A).

2 Using the ◀▶▲▼ Buttons, move the picture.

3 Press (B).

4 Using the ◀▶ Buttons, rotate the picture and using the ▲▼ Buttons, enlarge or reduce the picture.

- Pressing (B) returns to Step 2.

- Make the picture appear in the Index Display and then make the same picture appear again with the [DISPLAY] button.

• **When the picture is enlarged using the ZOOM IN button, the picture quality may be inferior.**

- You cannot enlarge, reduce, rotate or move the picture when setting to the multi select display or the calendar display.

Printing Batches/Indexing

Multiple pictures can be automatically printed from a card. Furthermore, 25 frames of images on a card can be indexed and printed.

- Select the INPUT method.
 - If you select all pictures, begin from Step 2.
- 1 Select the pictures, and mark them with (A) (●).
 - 2 Select [Batch] under [BASIC] on the MENU screen, and press (A).

Select a MENU you wish to use, and press (A).

- ① Print a batch of all pictures.
- ② Print a batch of selected pictures.
- ③ Print a batch of selected pictures with the Album function.
- ④ Index all pictures.
- ⑤ Index selected pictures.
- ⑥ Print a batch of Index selected pictures with the Album function.
- ⑦ Clear a batch of selected pictures.

- Press (B) to cancel.

- You can print a batch of pictures when also pressing [PRINT (DPOF/ ALL)] Button. (When you insert cards that are marked by DPOF, only the pictures for which DPOF setting were made are printed.)
- Pictures will be printed in the order selected.
- When using [Selected pictures], (●) mark will disappear when printing is complete. When using [Selected index], marks will not disappear after printing.
- All pictures stored to memory will be lost if the power is turned off.
- If [With date] is selected under [Date], the date will appear on all indexed pictures. However, dates cannot be verified on the TV Screen.

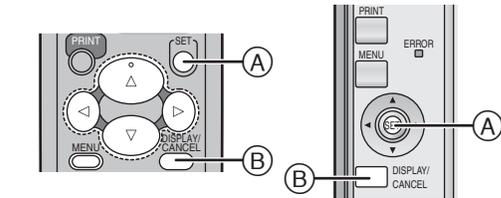
Using Date Search When Printing

Dates are recorded for pictures that were recorded on cards with Digital Movie Cameras or Digital Cameras. Using this information, pictures taken on the designated date(s) can be printed.

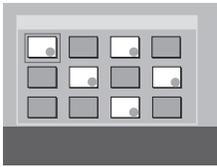
- Select the INPUT method.
- 1 Select [Search] under [BASIC] on the MENU screen, and press (A).
 - 2 Enter the period you wish to search (Begin Search Date/ End Search Date), and press (A).
 - ◀▶ Buttons: Change the Date
 - ▼▲ Buttons: Move the Cursor
 - Years can be entered from 1980 to 2040.
 - 3 Confirm the pictures you found (●) in the lower right corner, and press (B).
 - A batch of the searched pictures is printed.

- If no images could be found within the designated search period, a "A picture wasn't found." message will appear.
- To print all images that were found as a batch, return to the MENU screen and select [Selected pictures], under [Batch] in [BASIC].
- The selected pictures can also be viewed as a Slide Show.
- When searching the date on the Album Display, the screen switches to the Index Display.

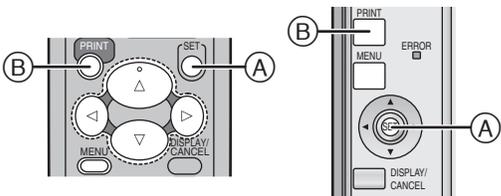
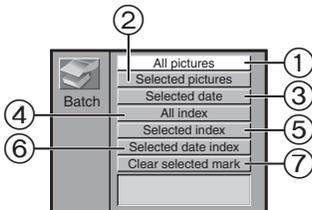
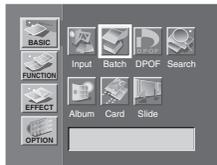
• When saving the picture file on a PC, the saved date is displayed.



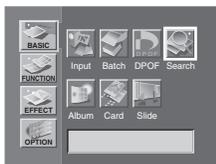
1



2



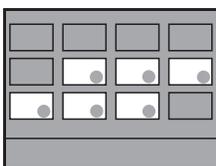
1



2



3



Printing With a DPOF Marked Card

When a card with marked files (DPOF) that contains pictures and print counts set with a Digital Video Camera or a Digital Camera is inserted, printing can be automatically be performed.

- Insert a DPOF card
- Select the INPUT method

1 Press **A** (DPOF Button) when the pictures are displayed.

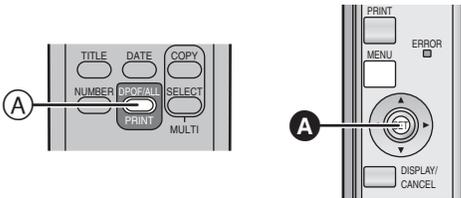
- Printing begins.

DPOF stands for Digital Print Order Format. Using a Digital Video Camera or a Digital Camera, this adds printing information to stored pictures on cards so they can be applied to DPOF systems.

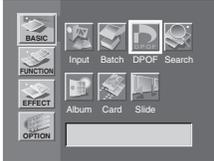
- When you insert a card for which DPOF setting is not made, all the pictures are printed by pressing [PRINT (DPOF/ALL)] Button.
- The Photo Printer cannot configure DPOF.
- Confirm settings on the equipment on which the settings were made.
- Setting the print count in [Number] under [OPTION] will have no effect. Only the DPOF configured print count will be printed.
- If 100 or more copies are set to be printed on the DPOF settings, only 99 will be printed.
- If you do not use the DPOF-configuring device to set the date on cards, it cannot be entered even when printing a batch of pictures.

To Operate with the Buttons on the main unit

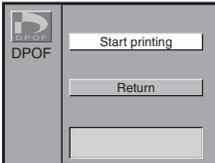
- 1 Select [DPOF] under [BASIC] on the MENU screen, and press **A**.
- 2 Using the **▲▼** Buttons, select [Start printing] or [Return], and press **A**.



1

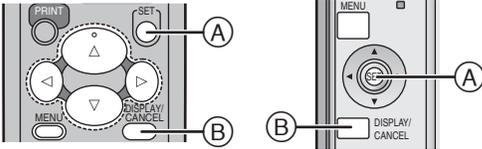


2

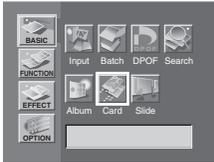


Copying/Erasing Images from a Card

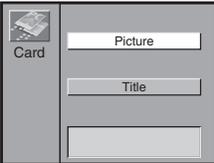
Images can be mutually copied to or erased from SD Memory/ MultiMediaCards and PC Cards.



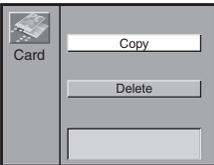
1



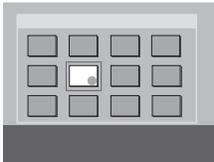
2



3



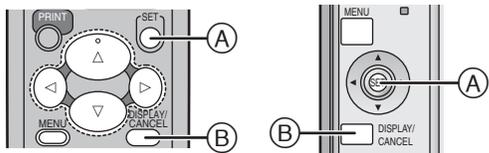
4



- Unlock the card when inserting the SD Memory Card.
 - Insert the card to both insert locations when copying the picture.
 - Select the card that contains the images you wish to copy or erase in the INPUT method.
- 1 Select [Card] under [BASIC] on the MENU screen, and press (A).
 - 2 Select [Picture], and press (A).
 - 3 Select either [Copy] or [Delete], and press (A).
 - Select the date, and press (A).
 - 4 Select an image, press (A), confirm the screen, and press (A) again.
 - Press (B) to cancel.
- Images will be permanently deleted.
 - Multiple copies of images cannot be selected at one time.
 - You cannot copy or erase the picture and title simultaneously.
 - Do not pull out card during copying or erasing.
 - You cannot copy or erase the locked picture. Unlock the picture on the equipment which locked it.
 - You cannot copy the picture to the card if there is no space left.

Recording Titles onto Cards

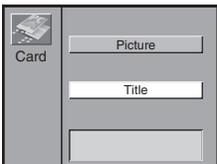
The Photo Printer can create titles through Title Functions menu selection (Illustrations/Characters) (P26, 27). Created titles can be recorded onto memory cards.



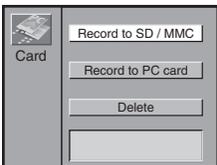
1 1



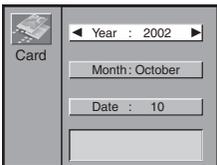
2 2



3



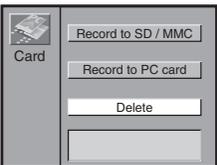
4



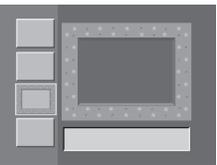
5



3



4



• Unlock the card when inserting the SD Memory Card.

• Display the created title.

1 Select [Card] under [BASIC] on the MENU screen, and press (A).

2 Select [Title], and press (A).

3 Select [Record to SD/MMC] or [Record to PC card], and press (A).

4 Enter the creation date, and press (A).

◀▶ Buttons: Change the Numbers

▼▲ Buttons: Move Cursor

5 Confirm the picture, and press (A).

• Press (B) to cancel before pressing (A).

• Do not pull out the card while recording titles onto card.

• Titles recorded to cards can be used in this unit.

• Only titles can be recorded to cards. Pictures containing both titles and images cannot be recorded.

Erasing Titles From Cards

Titles recorded on cards can be deleted.

• Unlock the card when Inserting the SD Memory Card.

1 Select [Card] under [BASIC] on the MENU screen, and press (A).

2 Select [Title], and press (A).

3 Select [Delete], and press (A).

4 Select a picture, and press (A).

• Press (B) to cancel before pressing (A).

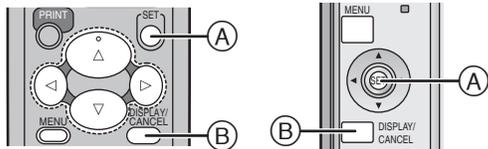
• Titles are permanently deleted.

• Titles on separately sold MultiMediaCards cannot be deleted.

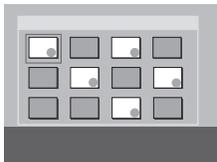
• Titles locked on Digital Video Camera cannot be erased.

Viewing Slide Shows

The Photo Printer can automatically display a continuous show of selected pictures within a card.



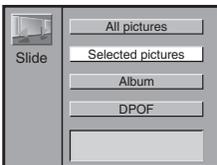
1



2



3



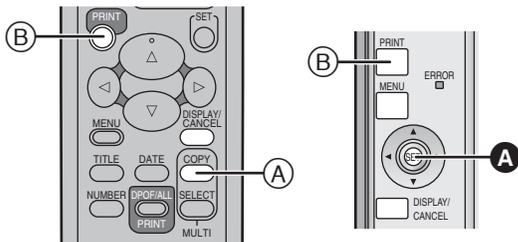
- To view DPOF configured pictures, insert a card with DPOF settings.
 - Select the INPUT method.
 - To view all pictures or DPOF configured pictures within a card, begin from Step 2.
- 1 Select the pictures, and mark them with (A) (●).
 - To remove a picture, select the picture and press (A). The ● symbol disappears.
 - 2 Select [Slide] under [BASIC] on the MENU screen, and press (A).
 - 3 Choose [All pictures], [Selected pictures], [Selected date] or [DPOF], and press (A).
 - Press (B) to cancel.

- Pictures may take a few moments to load, depending on the picture size.
- Do not remove the card during a Slide Show.
- When setting the Slide Show with other equipment, the pictures set with the other equipment have more priority than DPOF configured pictures. Cancel the setting with the other equipment.
- When selecting [Selected date], all pictures where a date has been recorded in the Album Display appear.
- Slide Show is repeated when you do not press (B).
- The characters of [Slide show] are displayed in the lower right corner of the screen during Slide Show.

Multiple Functions

Printing Multiple Screen Shots of the Same Picture (MULTI FRAME MODE)

The Photo Printer can divide the screen into 2, 4, 9 or 16 sections, and print multiple screen shots of the same picture.



- Select the INPUT method.
- Select the picture and make the Single Display appear.

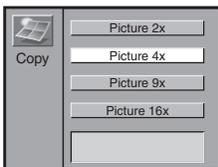
2



1



2



- 1 Press **(A)** (MULTI (COPY) Button) when the pictures are displayed.
 - [Copy16], [Copy9], [Copy4], [Copy2] or [Standard] is displayed in the left lower corner of the screen with each press of **(A)**.
- 2 Confirm the picture, and press **(B)** to print.

To Operate with the Buttons on the main unit

- 1 Select [Copy] under [FUNCTION] on the MENU screen, and press **(A)**.
- 2 Using the **(▲)** **(▼)** Buttons, select [Picture 2 x], [Picture 4 x], [Picture 9 x] or [Picture 16 x] and press **(A)**.
 - Go to Step 2 on the operations as noted with the remote controller after the operations above.

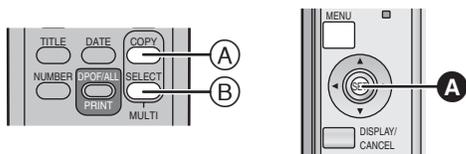
- You can also select multiple picture copies and print them as a batch.
- If [With date] is selected under [Date], the date will appear on each printed section of the picture. However, dates cannot be verified on the TV Screen.
- When an Ink Cassette for 16 Pre-Cut Adhesive paper is inserted, the screen will automatically be divided into 16 sections. If the Ink Cassette is removed, the screen will not automatically return to a single screen.

Returning a Multiple Screen to a Single Screen

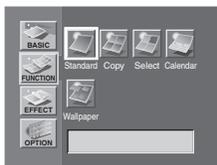
- 1 Press **(A)** (MULTI (COPY) Button) or **(B)** (MULTI (SELECT) Button) until [Standard] is displayed in the left lower corner of the screen when the pictures are displayed.

To Operate with the Buttons on the main unit

- 1 Select [Standard] under [FUNCTION] on the MENU screen, and press **(A)**.

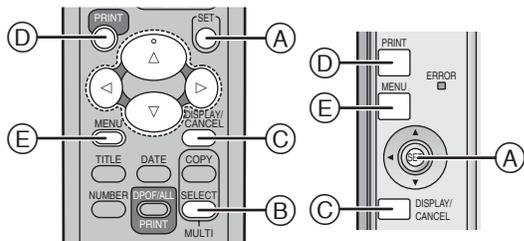


1

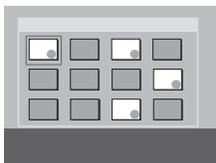


Printing Multiple Screen Shots of Different Pictures

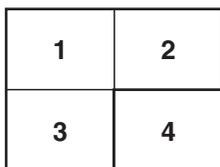
The Photo Printer can divide the screen into 2, 4, 9 or 16 sections, and print multiple screen shots of different pictures.



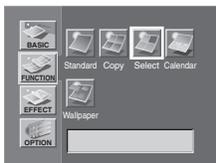
1 1



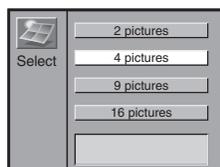
3



2



3



- Select the INPUT method.
- Make the Index Display appear.

1 Select the pictures, and mark them with (A) (●).

- Repeat for the selected number of pictures.
- Select the picture and then press (A) to make (●) disappear, if you cancel the selected pictures.

2 Press (B) (MULTI (SELECT) Button).

- [Select16], [Select9], [Select4], [Select2] or [Standard] is displayed in the left lower corner of the screen when pressing (B).

3 Press (C) to switch the screen.

- Pictures will be displayed from the top left of the screen in the order they were selected. (From the right if there are only 2 pictures)
- Reselected images will be positioned last.
- Pictures are displayed in the horizontal direction if there are only 2 pictures.

4 Confirm the screen, and press (D).

- Pictures stored in memory will be deleted one at a time each time you press the (▲) button. When you press the (◀▶) buttons, pictures stored in memory can be changed.

To Operate with the Buttons on the main unit

1 Select the pictures, and mark them with (A) (●).

- Repeat for the selected number of pictures.
- Select the picture and then press (A) to make (●) disappear, if you cancel the selected pictures.

2 Select [Select] under [FUNCTION] on the MENU screen, and press (A) (SET Button).

3 Using the ▲ ▼ Buttons, select [16 pictures], [9 pictures], [4 pictures] or [2 pictures] and press (A).

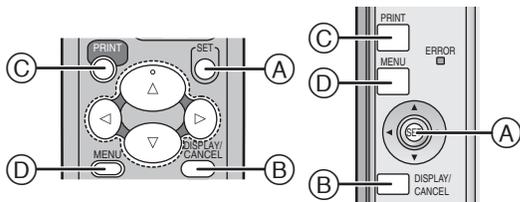
- Go to Step 3 on the operations with the remote controller after the operations above.

Selecting a Large Number of Pictures and Printing Multiple SELECT as batches

- 1 Select all necessary pictures in Step 1, and press $\text{\textcircled{E}}$ to go to the MENU screen.**
- 2 Select [Batch] under [BASIC] on the MENU screen, and choose [Selected pictures].**
 - e.g. Selecting [4 pictures] and 8 pictures: Selected pictures 1-4 will be printed on the first sheet, and selected pictures 5-8 will be printed on the second sheet.
- 3 Press $\text{\textcircled{D}}$ to print.**

- Pictures from various cards cannot be combined together.
- Selected images will disappear once printing is complete.
- If you change the Ink Cassette type after selecting pictures, you must reselect the pictures.
- If [With date] is set (P29) under [Date], the date will appear on each different picture shot. However, dates cannot be verified on the TV Screen.
- When an Ink Cassette for 16 Pre-Cut Adhesive paper is inserted, [16 pictures] will automatically be set. If the Ink Cassette is removed, the screen will not automatically return to a single screen.
- If you print the vertical picture, the pictures are displayed and printed rotated by 90 degrees.

Creating a Personalized Picture Calendar



The Photo Printer can insert a picture and create a 1-month, 2-month or 12-month personalized calendar. You can also change the colors of holidays or special days and dates.

• Select the INPUT method.

- 1 Select [Calendar] under [FUNCTION] on the MENU screen, and press (A).
- 2 Choose [1 month], [2 months] or [12 months], and press (A).
- 3 Select the beginning year and month for the calendar, and press (A).

◀▶ Buttons: Change the Date

▼▲ Buttons: Move Cursor

• You can select the beginning year from 2002 to 2040.

- 4 Press the (▲▼◀▶) Buttons to select the date or day when you wish to change the color.

• When you want to change colors, go to Step 5.

• The selected date or day turns yellow.

• The colors change as follows, with each press of (A).

Black, Red, Blue, Green, Black...

• The colors of year and month cannot be changed.

• Select ◀ or ▶ (a) and then press (A) to change the beginning year and month. However, you cannot change the year and month when creating the 1 month calendar.

- 5 Select [OK] (C) and press (A) after changing the color of the date.

- 6 Press (B) to make the pictures appear on the Index Display and select the pictures, and mark them with (A) (●).

• When creating 2-month calendars, select the pictures, and mark them with (A) (●) and then choose 2 pictures. The first picture is displayed in the upper left corner and the second one is displayed in the lower right corner. You cannot change the location of the pictures.

- 7 Press (B) to switch the screen.

- 8 After confirming the picture, press (C) to print.

• The pictures can be switched when pressing the (▲▼) Button.

• When creating 2-month calendars, press (D) to bring up the MENU screen.

• When creating 2-month calendars, they can be deleted one at a time by pressing the (▲) Button after storing pictures to memory.

• Select [Reset] (b) and then press (A) to return to the initial setting.

• The colors of days may be changed except for the selected year.

• [Illust], [Character] or [Display] under [EFFECT] menu cannot be used when selecting [Calendar]. However, [Sepia] can be used.

• When creating 1-month calendars, pictures and calendar are displayed in the horizontal direction.

• Characters may appear disfigured on the TV Screen, but will not be so when printed.

• Pictures from various cards cannot be combined together.

• If you change the Ink Cassette type after selecting pictures, you must reselect the pictures.

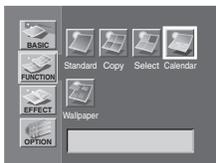
• The changed colors are stored in memory even after turning off the power.

• When an Ink Cassette for 16 Pre-Cut Adhesive paper is inserted, the screen will automatically be divided into 16 sections. If the Ink Cassette is removed, the calendar screen will not automatically return.

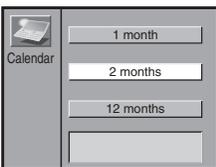
• Selected images will be cancelled once printing is complete.

• If you print the vertical picture, the pictures are displayed and printed rotated by 90 degrees.

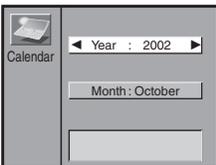
1



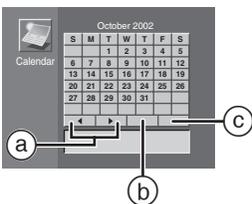
2



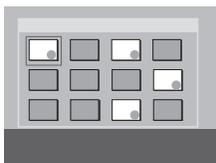
3



4



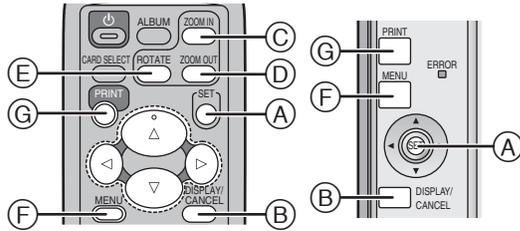
6



8



Inserting Wallpaper and Printing



You can insert Wallpaper stored within the Photo Printer onto pictures and print.

• Select the INPUT method. (P13)

1 Select [Wallpaper] under [FUNCTION] on the MENU screen, and press (A).

2 Select a wallpaper, and press (A).

• 12 kinds of wallpapers are preset.

3 Select a picture, and mark with (A) (●).

• Repeat Step 3 to select 2 or more pictures.

4 Press (B) to switch the screen.

5 Press the ▲▼◀▶ Buttons to set the position, (C) or (D) to set the size, (E) to set the direction, and then press (A). (P15)

• Repeat Step 5 when selecting 2 or more pictures.

• When pressing (F), you can enlarge, decrease and rotate the characters using the ▲▼◀▶ Buttons. Press (F) again to return to Step 5. Press (A) to go to Step 6.

6 After confirming the picture, press (G) to print.

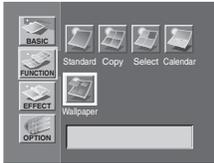
• Press (B), and you can select the picture again. You need to set the picture again at Step 5.

• Move the picture to the middle of the screen when enlarging, decreasing or rotating it.

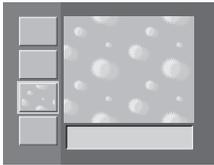
• Repeat step 5 after step 3 to composite multiple pictures.

• Select a function other than [Wallpaper] to cancel the wallpaper.

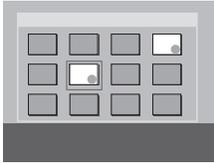
1



2



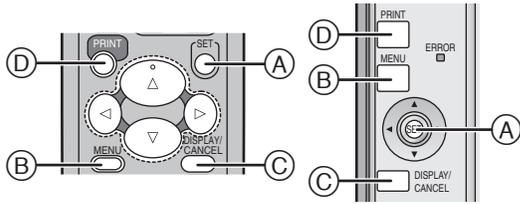
3



6



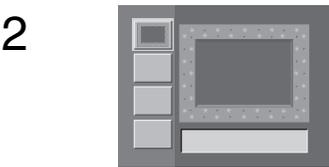
Title Functions



Inserting Illustrations and Printing

You can insert illustrations stored within the Photo Printer or within cards onto pictures and print.

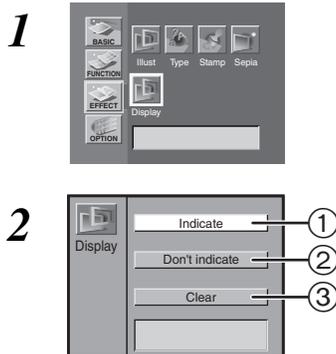
- Select the **INPUT** method.
- Select the picture you wish to print and make the **Single Screen Display** appear.



- 1 Select **[Illust]** under **[EFFECT]** on the MENU screen, and press **(A)**.
 - The MENU contents under **[EFFECT]** can be also displayed with **(B)**.
 - 2 Select an illustration, and press **(A)**.
 - 8 kinds of illustrations are preset.
 - 3 Press **(D)** to print.
 - Press **(B)** to re-select the illustration and begin from Step 1 again.
 - Press **(C)** to select the picture to insert the illustration again. You can also select the picture again using the **◀▶** buttons.
- If a title is recorded on a card, it will display after the preset illustration.
 - Created titles (Illustrations/Characters) can be recorded onto cards.
 - Select **[Don't indicate]** in **[Display]** under **[EFFECT]** if you do not want to display the created title (Illustrations/Characters) temporarily.
 - Select **[Clear]** in **[Display]** under **[EFFECT]** to delete created titles (Illustrations/Characters).
 - If an illustration is inserted onto a picture with characters, the characters will be deleted.

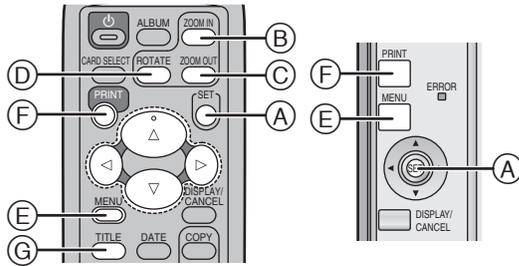
Switching Displays (Indicate/Don't indicate/Clear)

You can switch title displays (Illustrations/Characters) used in P26-P27 Indicate/Don't indicate. Also, you can cancel displayed titles by selecting [Clear].



- 1 Select **[Display]**, under **[EFFECT]** on the MENU screen, and press **(A)**.
- 2 Choose **[Indicate]**, **[Don't indicate]** or **[Clear]**, and press **(A)**.
 - ①: Displays the selected title on the screen.
 - ②: Temporarily removes the created title from the screen.
 - ③: Cancels the created title, and creates a new one.

Inserting Characters and Printing



You can insert characters stored within the Photo Printer onto pictures and print.

- Select the **INPUT** method.
- Select the picture you wish to print and make the **Single Screen Display** appear.

1 Select [Type], under [EFFECT] on the MENU screen, and press (A).

- The MENU contents under [EFFECT] can be also displayed with (G).

2 Insert characters.

- Press (A) each time you select a character.
- After choosing all the characters, select (1), and press (A).

A) Erasing Characters

Select [Delete], and press (A) to erase characters one at a time.

B) Switching Characters

Select either [Page 1] or [Page 2], and press (A) to switch characters.

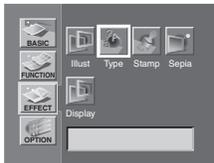
3 Select [OK] (1) after inserting all the characters and press (A).

- 4 Use the ▲▼◀▶ Buttons to position the character's location, (B) or (C) to select the character's size, (D) to rotate the character, and then press (A).**
- You cannot return from Step 4 to Step 3.
 - Pressing (E) enables you to select the character's size or to rotate the character by using the ▲▼◀▶ buttons. Pressing (E) once more, enables you to move the picture. Press (A) to move to Step 5.
 - Use the ◀▶ Buttons to select the character's color, and press (A).
 - Each time you press the ▶ Button, the color of the character changes in order: black, blue, green, cyan, red, magenta, yellow, white and black.

5 Press (F) to print.

- Turning the power off will delete all inputted characters.
- Select [Don't indicate] in [Display] under [EFFECT] if you do not want to display created title (Illustrations/Characters) temporarily.
- Characters may appear disfigured on the TV Screen, but will not be so when printed.
- The size of characters is restricted by the number of characters.
- Character fonts cannot be altered.
- Created titles (Illustrations/Characters) can be recorded onto cards.
- To delete created title displays (Illustrations/Characters), select [Don't indicate] or [Clear] in [Display] under [EFFECT].
- When you insert an illustration, insert it before inserting characters. If you insert an illustration after inserting characters, the characters will be deleted.
- You may not be able to enlarge or rotate the characters at the end of the screen. Move the characters after enlarging or rotating them.

1



2



A



B



3



4



5



Print in Sepia Tone

The Photo Printer can print pictures in Sepia tone.

- Select the INPUT method.
- Display the picture you wish to print and make the Single Screen Display appear.

1 Select [Sepia] under [EFFECT] on the MENU screen, and press (A).

- The MENU contents under [EFFECT] can be also displayed with (D).

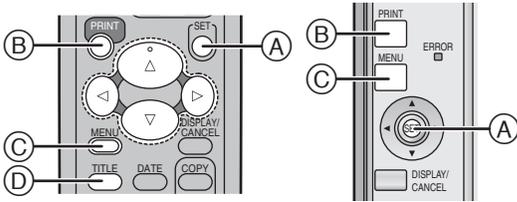
2 Select [Sepia style], and press (A).

3 Press (B) to print.

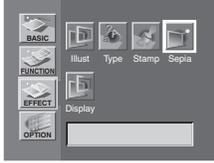
- Press (C) to bring up the MENU screen.

- Push the ◀▶ Buttons to select the other picture.

- [COLOR], [C-BALANCE] and [AWB] cannot be adjusted when [Sepia style] is selected.
- Titles (Illustrations/Characters) will not have a Sepia tone.



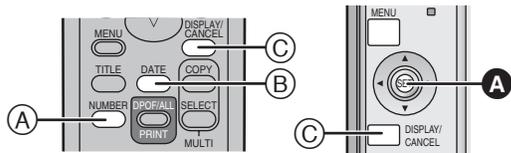
1



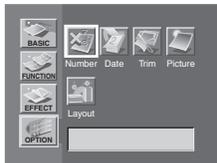
2



Settings



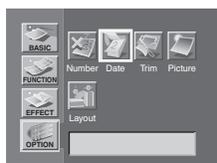
1



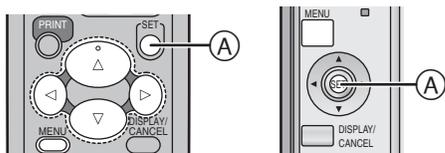
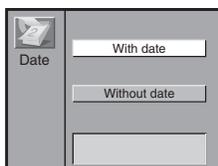
2



1



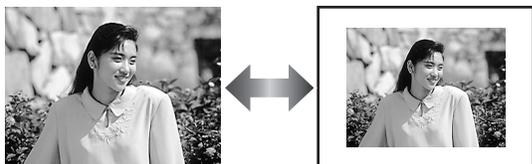
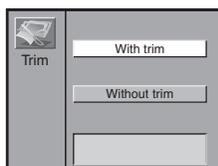
2



1



2



Settings

■ Set Number of Prints

1 Press (A) when the picture is displayed.

- The number of prints increases when pressing (A).
- The Photo Printer can continuously print up to 10 copies of the same image.
- The number of pages remaining to be printed (including the currently printing page) appears in the lower left corner of the screen.

To Operate with the Buttons on the main unit

- 1 Select [Number] under [OPTION] on the MENU screen, and press (A).
 - 2 Using the ◀▶ Buttons, select number of prints and press (A).
- You can select [1 sheet] to [10 sheets].

- Press (C) to cancel.

■ Setting Dates

DATE PRINTING

Prints the picture with recorded date in the lower right corner.

1 Press (B) when the picture is displayed.

- When [DATE] is displayed in green in the lower left corner, [With date] is selected.

To Operate with the Buttons on the main unit

- 1 Select [Date] under [OPTION] on the MENU screen, and press (A).
- 2 Using the ▼▲ Buttons, select [With date] and press (A).

- You cannot confirm the date on TV Screen.

- When saving the picture file on PC, the saved date is displayed.

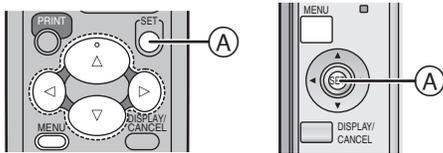
■ Trimming

The Photo Printer can trim the horizontal or vertical edges of a picture and stretch it so that the picture fills up the entire print space.

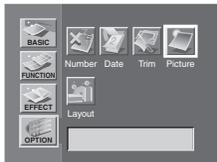
1 Select [Trim] under [OPTION] on the MENU screen, and press (A).

2 Select [With trim], and press (A).

- When [Without trim] is selected, the entire image data will always be fitted within the print paper. (Even borderless paper can contain space like the diagram on the left.)



1



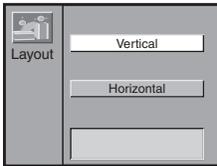
2



1



2



Adjusting Print Picture Quality

- Select the INPUT method.
- Select the picture you wish to adjust, and make the Single Screen Display appear.

1 Select [Picture] under [OPTION] on the MENU screen, and press (A).

2 Adjust the quality, and press (A).

▲▼ Buttons: Item Selection

◀▶ Buttons: Adjust

① Adjust the depth of the color.

② Adjust the color tint.

③ Clarify dark portions.

④ Adjust picture brightness and shade.

⑤ Sharpen outline.

⑥ Adjust white balance.

- Adjustments on the TV Screen are approximations.
- Adjustment on the TV Screen does not affect the printing image.
- Adjustment of [SHARP] and [AWB] does not change on the TV Screen.
- Adjustment is not recorded on the card.
- The color will not become black and white even if adjusting the depth of the color to [-].

Setting the Layout

When selecting the same setting as the layout, MENU moves as the Cursor Buttons of the main unit are pushed.

1 Select [Layout] under [OPTION] on the MENU screen, and press (A).

2 Select [Vertical] or [Horizontal], and press (A).

Connecting and Operating with a personal computer

Operating environment

Printer Driver can be installed in a PC/AT compatible personal computer which can run Microsoft® Windows® 98SE/Me/2000 Professional/XP Home Edition/XP Professional.

Compatible machines:

IBM-PC/AT compatible personal computer with a Pentium® II, Celeron™ (or compatible CPU) 500 MHz or higher, pre-installed with: Microsoft® Windows® XP Home Edition/Professional, Windows® Me, Windows® 2000 Professional or Windows® 98 Second Edition

Graphic display:

High Color (16 bit) or more.
Desktop resolution of 800X600 dots or higher.

Disk drive:

CD-ROM drive

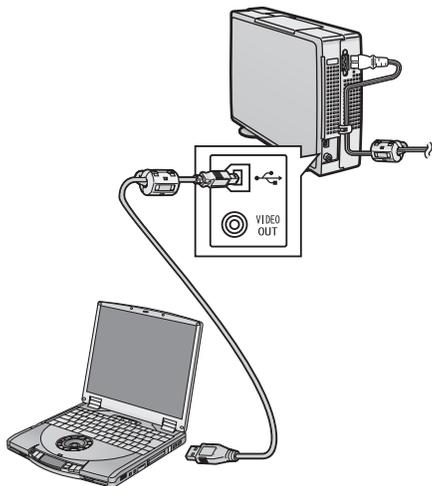
Ports:

USB Terminal (Up to 12 Mbps)

Other requirements:

Mouse

- Remove the memory card when using this printer as the printer for your PC.
- A USB hub or USB card used for connection is not recommended for normal operation.
- The names of the products you are using may differ from the names given in the text. Depending on the operating environment and other factors, the contents of the screens used in these instructions may not necessarily match what you will see on your screen.
- Although the screens in these Operating Instructions are shown in English for the sake of example, other languages are supported as well.
- Microsoft® Windows® is a registered trademark of Microsoft Corporation in the United States and other countries.



Installing the Printer Driver

Installing this printer driver allows the Photo Printer to be used as a full-color printer.

For Windows XP

- 1 Turn on the personal computer and install the supplied CD-ROM into the CD-ROM drive.
- 2 Turn on the Photo Printer.
- 3 Connect the Printer to the PC using the USB connection cable.
 - The [Found New Hardware Wizard] screen appears.
- 4 Click the [Next] Button.
 - Confirm that the item [Install the software automatically] is selected.
- 5 Click the [Finish] Button when the Printer Driver Software is detected.
 - The driver setup is completed.
 - When the Printer Driver Software is not detected, please refer to page 35.
 - Please also read "Notes on Installation of Printer Driver" (→ 39) carefully.



4,6



5



7



8



Installing this printer driver allows the Photo Printer to be used as a full-color printer.

For Windows Me

- 1 Turn on the personal computer and install the supplied CD-ROM into the CD-ROM drive.
- 2 Turn on the Photo Printer.
- 3 Connect the Printer to the PC using the USB connection cable.
 - The [Add New Hardware Wizard] screen appears.
 - Depending on your PC environment, step 4 and 5 may be skipped. If this is the case, proceed from step 6.
- 4 Click the [Next] Button.
- 5 Click the [Finish] Button when the Printer Driver Software is detected.
- 6 [Add New Hardware Wizard] screen appears again. Click the [Next] Button.
- 7 Select [No] when the [Add Printer Wizard] screen appears.
 - Select [Yes] to set as the default printer.
 - After clicking [Finish], the message [File *****.DLL is not found] can be displayed depending on the environment of PC. Many PCs may install this file on the Hard Disk. Click [Refer] and select [C:\windows\option\cabs].
- 8 Click the [Finish] Button.
 - The driver setup is completed.
 - When the Printer Driver Software is not detected, please refer to page 35.
 - Please also read "Notes on Installation of Printer Driver" (→ 39) carefully.

4,9



5



6



7



8



11



12,13



Installing the Printer Driver (Cont.)

For Windows 98SE/2000

- 1 Turn on the personal computer and install the supplied CD-ROM into the CD-ROM drive.
- 2 Turn on the Photo Printer.
- 3 Connect the Printer to the PC using the USB connection cable.
 - The [Add New Hardware Wizard] screen appears.
 - Depending on your PC environment, step 4 and 8 may be skipped. If this is the case, proceed from step 9.
- 4 Click the [Next] Button.
 - The [Add New Hardware Wizard] screen appears.
 - If the [Add New Hardware Wizard] screen does not appear, please refer to page 35.
- 5 Click the [Next] Button.
 - Confirm whether your device is configured to the optimal driver detection setting.
- 6 Check the location to be specified and enter the path as "D:\Win9X-ME" if your system is Windows 98SE. Enter the path as "D:\Win2K-XP" if your system is Windows 2000 (example of D drive assigned as CD-ROM drive).
- 7 Click the [Next] Button.
 - Re-click the [Next] Button when the search confirmation screen appears.
 - The message [File *****.DLL is not found] can be displayed depending on the environment of PC. Many PCs may install this file on the Hard Disk. Click [Refer] and select [C:\windows\option\cabs].
 - If your system is Windows 2000, proceed to step 13.
- 8 Click the [Finish] Button.
- 9 [Add New Hardware Wizard] screen appears again. Click the [Cancel] Button.
- 10 Restart the computer.
- 11 [Add New Hardware Wizard] screen appears again. Repeat the steps from 4 through 7.
- 12 Select [No] when the [Add Printer Wizard] screen appears.
 - Select [Yes] to set as the default printer.
- 13 Click the [Finish] Button.
 - The driver setup is completed.
 - Please read also the "Notes on Installation of Printer Driver" (→ 39) carefully.
 - When installation is not finished correctly or the message is displayed, refer to [Readme.txt] file in the supplied CD-ROM.

Installing from the [Add Printer Wizard] screen.

Notes for Installation

When the Printer Driver is installed on your personal computer for the first time, the USB port cannot be selected in the selection stage for the port, because the USB port is not set.

Note that the [Add Printer] function can be used only when the Printer Driver is re-installed or when another printer using the USB port has been installed.

- If the Plug and Play function activates the Install Wizard, install the Driver in the Plug and Play mode.

- If a screen asking you to execute a test print is displayed during installation, select [No]. Carry out a test print from the Printer Properties after installing the Driver.

- **For Windows XP**

- Select [Start] >> [Printers and Faxes].

- [Printers and Faxes] may not be present on some personal computers.

- In this case, select [Start] >> [Control Panel] >> [Printers and Other Hardware] >> [Printers and Faxes].

- **For Windows 98SE/Me/2000**

- Select [Start] >> [Settings] >> [Printers].

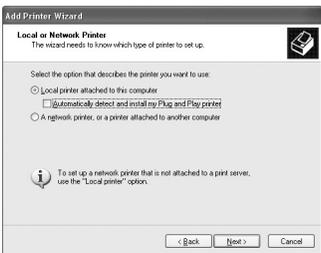
For Windows XP

- 1 Before installation, check that all applications have been exited.
- 2 Connect the printer to your personal computer with a USB cable and turn on the printer.
- 3 Select [Start] >> [Printers and Faxes]. [Printers and Faxes] may not be present on some personal computers. In this case, select [Start] >> [Control Panel] >> [Printers and Other Hardware] >> [Printers and Faxes].
- 4 Select [Add a printer] from [Printer Tasks].
- 5 When the [Add Printer Wizard] is activated, click [Next].
- 6 Select [Local printer attached to this computer] and remove the selection (un-select) [Automatically detect and install my Plug and Play printer]. Please follow directions in Figure1.
- 7 Click [Next].
- 8 Select [Use the following port] and select the port through which the Printer is connected from the adjacent list below.
 - Select [USB00X], for example [USB001].
- 9 Click [Next].

5

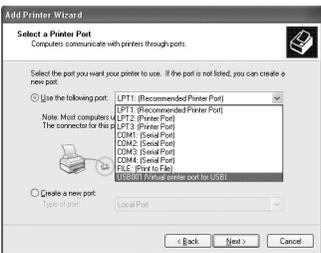


6,7



(Figure1)

8,9



Installing the Printer Driver (Cont.)

10



10 Click [Have Disk].

11 Select the folder where the Printer Driver is located.

- If the CD-ROM drive is the [D: drive], select [D:\Win2K-XP] folder.

12 Click [OK].

13 Check that [Panasonic SV-AP10] is displayed and click [Next].

14 Click [Next].

- If the screen to select default printer is displayed, select [Yes], if it is the default printer.

- If the screen to select whether the printer is shared or not is displayed, select [This Printer is not Shared], if the printer is not shared and click [Next].

15 If a screen asking you to execute a test print is displayed during installation, select [No], and click [Next].

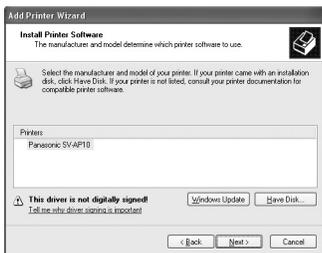
16 Click [Finish].

- The installation is now complete.

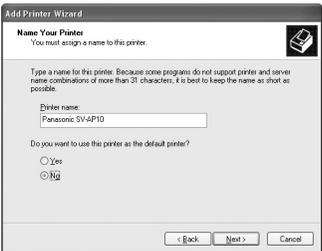
11,12



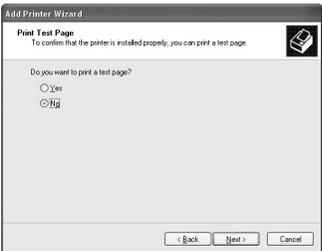
13



14



15



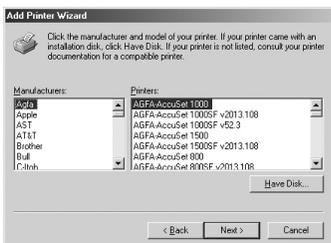
16



6



7



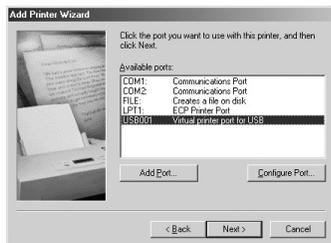
8,9



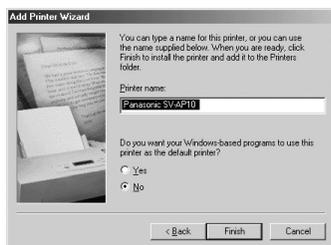
10



11



12,13



For Windows 98SE/Me

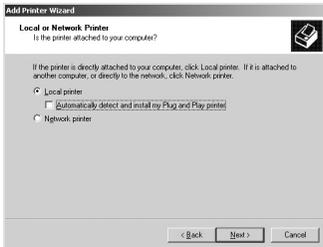
- 1 Before installation, check that all applications have been exited.
- 2 Connect the printer to your personal computer with a USB cable and turn on the printer.
- 3 Select [Start] >> [Settings] >> [Printers].
- 4 Double-click the [Add Printer] icon.
- 5 When the [Add Printer Wizard] is activated, click [Next].
- 6 Select [Local Printer] and click [Next].
- 7 Click [Have Disk].
- 8 Select the folder where the Printer Driver is located.
 - If the CD-ROM drive is the [D: drive], select [D:\Win9X-Me] folder.
- 9 Click [OK].
- 10 Check that [Panasonic SV-AP10] is displayed and click [Next].
- 11 Select the USB port through which the Printer is connected and click [Next].
 - Select [USB00X], for example [USB001].
- 12 Click [Next].
 - If a screen to select the default printer is displayed, select [Yes] if it is to be the default printer.
- 13 Click [Finish].
 - If a screen asking you to execute a test print is displayed during installation, select [No].
 - The installation is now complete.

Installing the Printer Driver (Cont.)

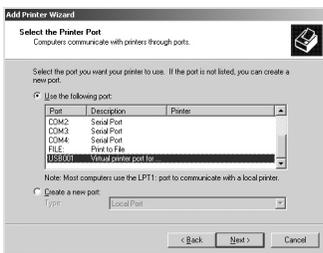
5



6,7



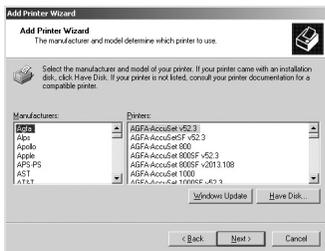
8,9



For Windows 2000

- 1 Before installation, check that all applications have been exited.
- 2 Connect the printer to your personal computer with a USB cable and turn ON the printer.
- 3 Select [Start] >> [Settings] >> [Printers].
- 4 Double-click the [Add Printer] icon.
- 5 When the [Add Printer Wizard] is activated, click [Next].
- 6 Select [Local Printer] and deselect [Automatically detect and install my Plug and Play printer].
- 7 Click [Next].
- 8 Select [Use the following port] and select the port through which the Printer is connected in the adjacent list.
 - Select [USB00X], for example [USB001].
- 9 Click [Next].

10



10 Click [Have Disk].

11 Select the folder where the Printer Driver is located.

- If the CD-ROM drive is the [D: drive], select [D:\Win2K-XP] folder.

12 Click [OK].

13 Check that [Panasonic SV-AP10] is displayed and click [Next].

14 Click [Next].

- If the screen to select the default printer is displayed, select [Yes], if it is the default printer.

- If the screen to select the whether the printer is shared or not is displayed, select [This Printer is not Shared], if the printer is not shared and click [Next].

15 If a screen asking you to execute a test print is displayed during installation, select [No], and click [Next].

16 Click [Finish].

- The installation is now complete.

Notes on Installation of Printer Driver

- If your system is Windows XP or Windows 2000, log on with the user name of [Administrator (administrator of your PC)] (or any user name having an equivalent right to the administrator) and then start to install.

Uninstalling the Printer Driver

Before uninstalling the Printer Driver, disconnect the USB connection Cable.

For Windows XP

1 Select [Start] >> [Printers and Faxes].

- [Printers and Faxes] may not be present on some personal computers.
- In this case, select [Start] >> [Control Panel] >> [Printers and Other Hardware] >> [Printers and Faxes].

2 Right-click [Panasonic SV-AP10] and select [Delete].

- The Printer Driver is uninstalled.

For Windows 98SE/Me/2000

1 Select [Start] >> [Settings] >> [Printers].

2 Right-click [Panasonic SV-AP10] and select [Delete].

- The Printer Driver is uninstalled.

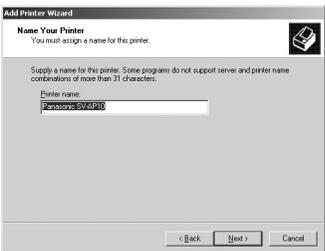
11,12



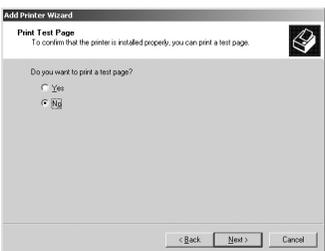
13



14



15



16



Printing from PC

The operations and notes of the printer driver are explained.
It is explained with [SD Viewer for Printer] in the supplied CD-ROM.

To install [SD Viewer for Printer]

- 1 Install the CD-ROM and double-click the [SD Viewer].
- 2 Double-click the [Setup.exe].
 - The install screen is displayed.
- 3 Click [Next].
- 4 Read [Agreement] and click [Agree].
- 5 Keep installing according to the message.

To Start [SD Viewer for Printer]

- Click [Start] >> [Programs]/[All Programs] >> [Panasonic] >> [SD Viewer for Printer] >> [SD Viewer for Printer].
- Read the Operating Instructions (PDF) for details. Click [?] on the screen to open it.
- To view the installed operating instructions, Adobe Acrobat Reader 4.0 or higher is required. Install Adobe Acrobat Reader 5.0 from the supplied CD-ROM.

To Select the Picture

- 1 Click the folder saving the picture from the explorer.
 - The thumbnails are displayed.
When restarting, the pictures in the folder selected last are displayed after finishing [SD Viewer for Printer].
- 2 Click the pictures.
 - The selected pictures are surrounded with the blue flame.
- 3 Click [File] >> [Print].

To Select the Printer

- 4 Click  to open detail setting.
 - The application reads the printer set to [Set as Default Printer].
 - The setting screen and name of printer displayed are different depending on OS.
- 5 Set the paper or division number.
 - The paper and division number are not set automatically. Be sure to set them.

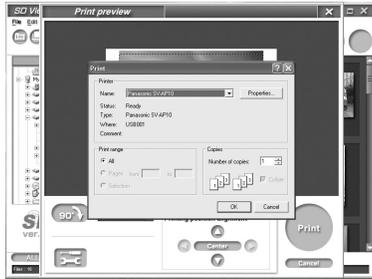
3



4



1,2

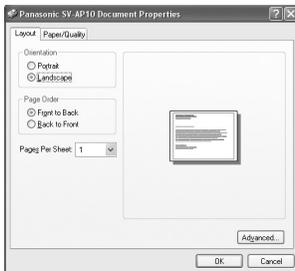


For Windows XP/2000

After opening the detail setting on [Print].

- 1 **Set the printer name to [Panasonic SV-AP10].**
 - Select [SV-AP10] from the printing menu when using it from the other application.
- 2 **Click [Properties].**
- 3 **Click [Layout] tab.**
- 4 **Click [Advanced].**

3,4

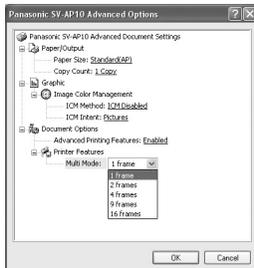


After opening [Advanced Options].

- 5 **Select the paper.**
- 6 **Select the division number.**
 - When printing one picture, select [1 frame].

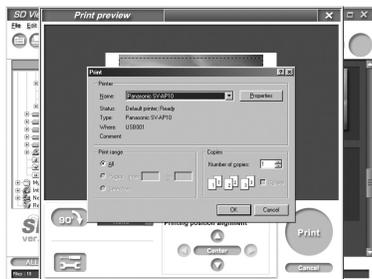
Be sure to select [16 frames] when using 16 Pre-Cut Adhesive printing paper.

5,6



For Windows Me/98SE

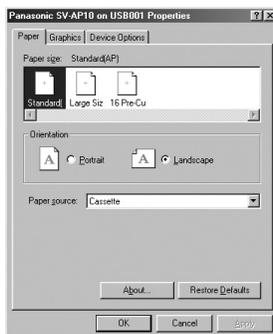
1,2



After opening the detail setting on [Print].

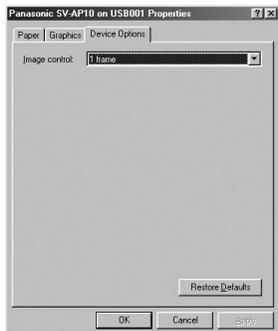
- 1 **Set the printer name to [Panasonic SV-AP10].**
 - Select [SV-AP10] from the printing menu when using it from the other application.
- 2 **Click [Properties] and select [Paper] and [Division number] on [Paper] and [Device Options] tab.**
- 3 **Click [Paper] tab.**
- 4 **Click the icon of [Paper] to select the paper.**

3,4



Printing from PC (Cont.)

5,6



- 5 Click [Device Options] tab.
- 6 Select the division number.
 - When printing one picture, select [1 frame].

Be sure to select [16 frames] when using 16 Pre-Cut Adhesive printing paper.

- 7 Finish the setting.
 - Clicking [OK] returns to the preview screen.
- 8 Click [Print].
- 9 Click [Yes].
 - The status monitor is displayed and printing starts.

8

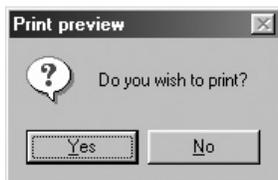


The setting of the paper and division number returns to the initial setting when finishing the application. Changing of the initial setting affects the setting of the printer when starting the application.

To change the initial setting

- **For Windows XP**
 Select [Start] >> [Control panel] >> [Printers and Other Hardware] >> [Printer and Faxes] to open the property and select the paper and division number from [General] >> [Print Preferences] >> [Advanced].
- **For Windows 2000**
 Select [Start] >> [Settings] >> [Printers] to open the property and select the paper and division number from [General] >> [Print Preferences] >> [Advanced].
- **For Windows 98SE/Me**
 Select [Start] >> [Settings] >> [Printers] to open the property and select the paper and division number from [Paper] and [Device Options].

9



When clicking [OK], setting is saved.

Caution for Use

The status monitor

Use the paper fitted to the ink cassette. When using different ink cassette from [Paper] setting, the error message is displayed.

In some cases as indicated below, the status monitor may not appear during printing.

- 1 When the application is displayed on the full screen or when you operate the application during printing, the status monitor may not be displayed. Click [Panasonic SV-AP10 USB0...] to display it.**
- 2 The printer may not be connected or the other printer may be selected. Confirm the connection of the printer.**
- 3 When printing with the printer connected, the old data may be printed.**

Printing data may be left in the spool of the printer. Delete the unnecessary data of the printing job.

To delete the data of the printing job:

[For Windows XP]

- Select [Start] >> [Printers and Faxes].
[Printers and Faxes] may not be present on some personal computers. In this case, select [Start] >> [Control Panel] >> [Printers and Other Hardware] >> [Printers and Faxes].
- Double-click this Printer's icon. A window will be displayed. Select [Cancel All Documents] from the [Printer] on the menu bar in the window.

[For Windows 2000]

- Select [Start] >> [Settings] >> [Printers] and double-click this Printer's icon. A window will be displayed.
- Select [Cancel All Documents] from the [Printer] on the menu bar in the window.

[For Windows 98SE/Me]

- Select [Start] >> [Settings] >> [Printers] and double-click this Printer's icon. A window will be displayed.
- Select [Purge Printing Documents] from the [Printer] on the menu bar in the window.

4 The message [USB port cannot be detected] may be displayed when you start printing.

- The usable USB port may not be selected. The USB port is displayed as [USB001] or [USB002]. Confirm it.

To Confirm the USB port

[For Windows XP]

- Select [Start] >> [Printers and Faxes].
[Printers and Faxes] may not be present on some personal computers. In this case, select [Start] >> [Control Panel] >> [Printers and Other Hardware] >> [Printers and Faxes].
- Open the properties of this Printer and select USB port in the [Ports] tab.
- Open the properties of this Printer and select [Enable bidirectional support] in the [Ports] tab.

[For Windows 2000]

- Open the properties of this Printer and select USB port in the [Ports] tab.
- Open the properties of this Printer and select [Enable bidirectional support] in the [Ports] tab.

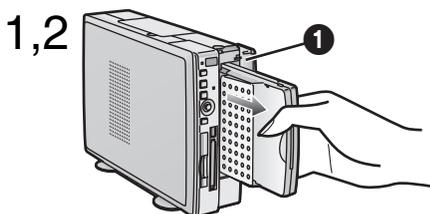
[For Windows 98SE/Me]

- Open the properties of this Printer by selecting [Start] >> [Settings] >> [Printers] and set the USB port for [Print Destination Port] in the [Details] tab.
- Open the properties of this Printer, click the [Spool Settings] button in the [Details] tab and select [Enable bidirectional support for this printer]

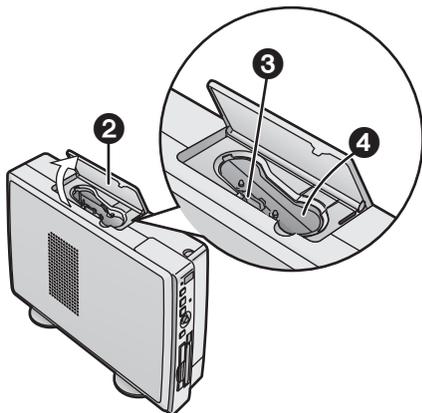
Others

After Use

- 1 Turn the power off, and remove the Paper Cassette.
 - 2 Close ① (Paper Cassette Door).
 - 3 Open ② (Ink Cassette Door), pull ③ (Ink Cassette Eject Lever) forward, pick up ④ (indented portion of the Ink Cassette) and lift it straight up.
 - 4 Close ②.
- If you used a card, remove the card as well.
 - Leave ① and ② closed except when inserting/removing each cassette.



3,4



Precautions

To ensure high quality, precise printing, always observe the following points. Failure to observe these points will not only result in poor quality prints, but also paper jams, malfunctions and breakdowns of the Photo Printer.

Ink Cassette/Paper Set Notes

- Use Ink Cassette/Paper Sets that bear the ΔP mark.
- Use the Ink Cassette with the paper provided in the same box. One Ink Cassette is designed to provide enough Ink Film to print the number of sheets provided in that Ink Cassette/Paper Set.
- Do not store the Ink Cassettes or paper under high temperatures, high humidity, or direct sunlight. Doing so could result in a deterioration of printing quality. They may also become unusable.
- Do not forcibly pull the Ink Film or paper. Do not allow finger prints or dust to attach to either, and do not allow them to get wet.
- Do not reuse printed paper or Ink Cassettes.
- Do not open the Ink Cassette/Paper Set package immediately. Allow it to warm up to the surrounding temperature before using it. If the Ink Cassette/Paper Set has been stored at a low temperature, condensation could form when brought into a warmer room.
- If the Ink Cassette/Paper Set is defective due to a manufacturing error on the part of Panasonic, we will replace the Ink Cassette/Paper Set with an equivalent Ink Cassette/Paper Set. Panasonic shall not bear any responsibility beyond replacing the product.

Ink Cassette Notes

- Do not remove the label from the Ink Cassette.
- Before inserting an Ink Cassette, take up any slack in the Ink Film. Take up slack by pressing your finger in the hole with the arrow on it, and turning the spool in the direction of the arrow.
- Make sure that the Ink Cassette is oriented properly, and insert it all the way in.
- If you change the Ink Cassette type after selecting pictures in Card Input, you must reselect the pictures.
- When a used up Ink Cassette is inserted, it may take about 15 seconds to operate correctly.

Paper/Paper Cassette Notes

- Do not fold or bend the paper. Lay it flat, smooth it out, and insert it into the Paper Cassette with the print side (the glossy side of the paper with no markings on it) up.
- Do not load too much paper in the Paper Cassette. No more than 25 sheets of 4" x 5-7/8" (100 x 148 mm) printing paper or 36 sheets of adhesive paper, 16 Pre-Cut adhesive paper, 4" x 6" (100 x 150 mm) printing paper without borders should be loaded.
- Do not allow dirt on the print side (white side) of the paper.
- When printing on the back side of paper with another printer, the ink may not easily dry depending on the type of printer used.
- Dust and humidity damage the paper. Remove all remaining paper from the Paper Cassette, return it to the original bag, and store it flat.

■ Before, During, and After Printing

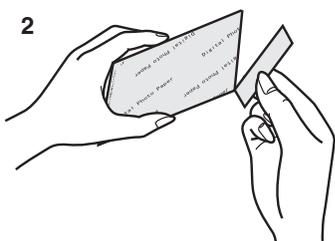
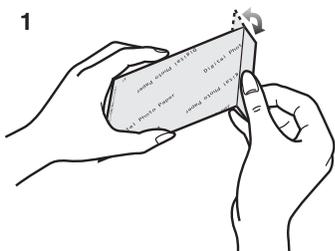
- Do not write on the paper before printing on it.
- Do not forcibly pull out the Ink Cassette or paper, shake the printer, or add more paper while printing is in progress.
- Removing the Paper Cassette while printing is in progress could result in a paper jam in which the jammed paper cannot be pulled out. The jammed paper can only be removed when the Paper Cassette is inserted.
- While printing is in progress, no other buttons besides the Display/Cancel button used to cancel multiple prints will work.
- The printer will make a little noise when printing, but this is not a malfunction.
- Printing 2 or more pages, or printing in cold or hot temperatures may take a little more time.
- If ink or paper runs out while printing is in progress, it is unnecessary to press the print button again after you replace the ink or paper.
- If you print a dark image with this Photo Printer, it may become a lighter print by using the AGC (Auto Gain Control).
- When paper is bent or wrinkled, it may fall out of the paper exit tray (located above the Paper Cassette).
- **Do not allow more than 10 sheets of printed paper to collect in the paper exit tray, as doing so may lead to a paper jam.**

■ Notes on Using 4" x 6" (100 x 150 mm) printing paper

- When printing borderless prints, select [With trim]. A blank border can be created around the top, bottom, left and right sides of a picture when selecting [Without trim].
- When printing with borderless paper, the top, bottom, left and right sides of the picture will be cut off.

Cutting Borderless Paper After Printing

- 1 **Fold in both directions along the perforation lines.**
 - 2 **Tear along the perforation lines.**
- There are perforation lines on both ends of the borderless paper. Be sure to tear off both sides.



■ Notes on Handling Finished Prints

In order to preserve finished prints in the best condition, always observe the following points. Failure to observe these points could result in a deterioration of print quality or injury.

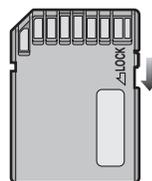
- Do not affix cellophane tape to the printed surface. In particular, be careful not to let plastic desk pads, business card cases, or plastic erasers come into contact with the printed surface.
- Do not touch the printed surface with your fingers.
- Do not spill or apply volatile solvents such as alcohol to the printed surface. Doing so could result in discoloration or fading.
- Do not leave printed surfaces in contact with one another. Doing so could cause color transfer between the two images. Color transfer could also occur if a printed surface is left in contact with any other type of paper under pressure for an extended period of time.
- Do not store prints under conditions of high temperatures or high humidity. Leaving prints under such conditions for an extended period of time could cause a deterioration in print quality. Do not leave prints exposed to direct sunlight.
- When prints are to be stored in an album, select an album that has nylon pockets. Other materials could cause color transfer or discoloration. (Polypropylene and cellophane are also acceptable materials.)

■ Notes on Cards

- If a card's image does not display properly, turn off the power, remove the card, and re-insert it.
- Some titles recorded to the cards are not displayed on the Digital Video Camera.
- This Photo Printer is based on the DCF standards (Design rule for Camera File system) which were established by JEITA (Japan Electronics and Information Technology Industries Association).
- When the Index Display appears and the image is based on the DCF standards is selected, the folder/file number of this image is displayed.

■ Notes on the SD Memory Card Write-Protect Switch

- The SD Memory Card has a write-protect switch. Sliding the switch to [LOCK] prevents the recording of data to the card as well as the deletion of data from the card. Sliding back the switch permits such operations.



■ About the Exif Print

This unit corresponds to the image format Exif 2.2 (Exif Print) that has been established by JEITA.

It is realized that the printed image is more clear with recording information added on the image by the Digital Camera.

■ Notes on Storing Settings to the Photo Printer's Memory

When the following settings are configured, they will remain stored until they are altered again, even if the power is turned off. (If the Photo Printer's power is turned off by disconnecting the AC Power Cord instead of pressing the power button, all configurations will be lost.)

- [Input], under [BASIC]
- Begin search date/End search date in [Search], under [BASIC].
- Creation dates in [Card], under [BASIC]
- The screen division number in [Copy] and [Select] under [FUNCTION]
- Color settings in [Set colour], under [Calendar] in [FUNCTION]
- Starting date in [Set colour], under [Calendar] in [FUNCTION]
- [Date], under [OPTION]
- [Trim], under [OPTION]
- [Rotate], under [OPTION]
- [Layout], under [OPTION]

■ Notes on Handling the Photo Printer

- When spraying or using insecticides or other volatile solvents in the vicinity of the Photo Printer, be careful not to allow any to come into contact with the printer. If such solvents come into contact with the printer, they can damage the outer case and cause the surface to peel. Do not allow rubber or plastic products to be in contact with the printer for extended periods of time.
- When not using the Photo Printer for extended periods of time, turn off the power and disconnect the Power Cable from the outlet to conserve energy. (0.04A of electricity are still used when the power button alone is turned off and the computer is on STAND BY.) Since damage to the printer may be incurred, turn on the power at least once every 6 months and use the Photo Printer.
- When transporting this printer, during a move for example, pack the printer back into its original case. If you no longer possess the case, wrap the printer in a blanket or other such cloth material to prevent any damage. (Remove the Paper Cassette and the Ink Cassette, and close the lid.)

■ Installation Notes

- Install the Photo Printer away from other devices that generate magnetic fields.
- Keep the Photo Printer away from magnetized equipment (such as a cell phone, microwave oven, TV, video game equipment, etc.). Electromagnetic waves produced in this Photo Printer and in televisions, video games, and other devices can cause mutual interference, disrupting both the display on the television screen and the print picture or damage of the card.

■ Maintenance Notes

- Do not use Benzene, paint thinner, or other solvents to clean the printer. Most of the printer surface is plastic. Do not use solvents such as Benzene and paint thinner to wipe the printer since they can damage the surface of the printer and cause the surface to peel. To clean the surface, wipe up any dust with a soft, dry cloth. If the Photo Printer is particularly dirty, soak the cloth in kitchen detergent (neutral) diluted with water and wring out thoroughly. Then, wipe off the dust with the cloth and wipe again with a dry cloth. When using a synthetic cloth, follow the precautions in the cloth's usage instructions.
- When the ventilation holes become dusty, remove the Ink Cassette, and get rid of the dust using a vacuum cleaner. If dust gets into the Photo Printer from the ventilation holes, the Ink Film becomes dusty and the picture will not be printed clearly.

■ Internal Temperature

- Although it varies with the ambient temperature, if the internal temperature of the Photo Printer rises above a certain level while printing, the error message "The temperature of the device is too high, please wait." will appear on the TV Screen. In this situation, the printing operation will halt temporarily. This is not a malfunction. After waiting for a few minutes for the temperature to drop (four or five minutes at the most), the Photo Printer will automatically resume printing. The printing operation may be halted temporarily in any of the following cases, which will result in a longer than normal printing time.
 - 1 When printing images continuously
 - 2 When the ambient temperature is high
 - 3 When the internal temperature of the printer rises quickly because the ventilation holes or other parts are blocked
- Note that if two or more of these conditions exist, printing will take even longer. Therefore, make every effort to find a well-ventilated location for installing this printer.

■ Condensation

- When a bottle is taken out from a refrigerator in summer and left standing for a while, droplets of water will form on it. This phenomenon is known as condensation. Condensation will form if the printer or Ink Cassette/ Paper Set is moved to a location with a considerable difference in temperature or humidity, such as:
 - 1 A high-humidity location, such as one filled with steam
 - 2 When suddenly moved from an air-conditioned environment to one with high temperatures and high humidity
 - 3 A room that has just been heated
- If condensation occurs, turn the power on and wait for 2 hours. If the paper or rollers are damp with condensation, the printed surface that is produced may be dirty.

Q&A

About Functions

- 1: **What should I do about poor coloring?**
- 1: The color and other parameters can be adjusted by selecting [Picture], under [OPTION] on the MENU screen.
- 2: **Is it possible to insert a title for each [Copy] Mode screen?**
- 2: It is possible in [Copy] Mode, but it is not possible to insert a different title for each mini-frame. It is not possible in normal [Select] Mode.
- 3: **Why do pictures get cut off when I print them on borderless paper?**
- 3: Borderless paper designed for 4" x 6" (100 x 150 mm) printing paper pictures have a length-width ratio of $1:\sqrt{2}$. The length-width ratios of Digital Video Cameras are 3:4, so the top and bottom portions of pictures will be cut when printing on borderless paper.

About the Photo Printer in General

- 4: **What is the "thermal sublimation transfer printing system"?**
- 4: This is a type of printing method offering excellent image quality. Other methods exist, such as the direct thermal printing method.
- 5: **What does "256 color gradations" mean?**
- 5: It means that the Photo Printer can express 256 gradations of color between white and the darkest color formed by the 3 primary colors. Because each of the 3 colors can be expressed in 256 gradations, the total numbers of colors is $256 \times 256 \times 256$ (approximately 16,780,000 full colors).
- 6: **How do the Ink Cassettes interact with the paper?**
- 6: The Ink Cassettes contain 3 colors in one unit: cyan, magenta, and yellow. The printing paper has a special coating that improves the adhesion of the ink.
- 7: **What is the maximum number of picture files that the Photo Printer can handle?**
- 7: The Photo Printer can handle up to 20,000 files.
- 8: **Regarding cards, how many pixels can the Photo Printer handle in an image?**
- 8: The Photo Printer can handle up to approximately 25 million (6,144 x 4,096) pixel images.
- 9: **How should I store my prints?**
- 9: We recommend keeping them in an album. When doing so, make sure that the pockets are made of nylon, polypropylene, or cellophane. Using other materials may result in color transfer or discoloration.

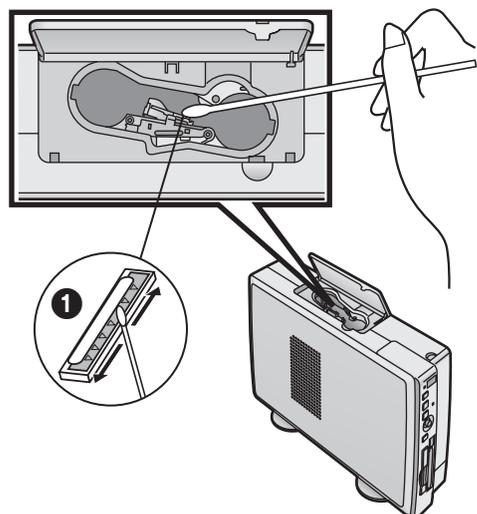
About Paper and Ink Cassettes

- 10: **How should I store the Ink Cassettes and paper after having opened them?**
- 10: Do not leave the Ink Cassettes or paper in a location exposed to direct sunlight, or in a location subjected to high temperature or high humidity. Place the cassette or paper back in its original bag, and then store them flat. These supplies should be used as soon as possible after they are opened.

- 11: **What kind of paper can the Photo Printer print on?**
- 11: The Photo Printer can print on 4" x 5-7/8" (100 x 148 mm) printing paper, 16 Pre-Cut adhesive paper and 4" x 6" (100 x 150 mm) printing paper. Do not use other types of paper, since doing so could cause paper jams or other malfunctions. Use the special Ink Cassette/Paper Set when printing.
- 12: **Can the Photo Printer print images continuously?**
- 12: If [Number] is selected under [OPTION] on the MENU screen, up to 10 sheets can be printed continuously. **Do not allow more than 10 sheets of printed paper to collect in the paper exit tray, as doing so may lead to a paper jam.**
- 13: **How many sheets can be printed with a single Ink Cassette?**
- 13: An Ink Cassette can print the number of sheets that are included in the same Ink Cassette/Paper Set. For example, the Ink Cassette/Paper Set VW-APA50U is intended for 50 sheets, so the Ink Cassette can print 50 sheets. Ink Cassettes cannot be rewound and used again.
- 14: **What kinds of Ink Cassettes and printing paper can I use with the Photo Printer?**
- 14: Use Ink Cassette/Paper Sets that bear the  mark.

About Unclean Thermal Heads

- If a line appears across a printed picture and pictures cannot be printed clearly, Thermal head (the ① portion on the below picture), located in the insertion portion of the Ink Cassette, may be dirty. In that case, insert a cotton swab (about 6" (15 cm) in length) all the way into the Ink Cassette and clean thermal head.
- Be sure to disconnect the Power Cable from the outlet before cleaning thermal head.
 - Do not insert your finger into the Ink Cassette Insert Location, as an injury may result.



Before Requesting Service

If trouble persists even when the action suggested below has been taken, press the Power Button to turn off the power or disconnect and re-connect the AC Power Cord.

1: The cursor cannot be moved in the direction shown on the arrows by pressing the ◀▶▲▼ buttons with this unit.

1: Select [Layout] correctly.

2: The power cannot be switched on.

2: The power plug is not plugged in correctly.

3: No picture appears on the screen.

3-1: The card is not properly inserted.

3-2: A card with a different format than that which can be used by the Photo Printer is being used.
e.g. SD/MMC/CF can be used.

→ Pictures from the card cannot be printed with the Photo Printer.

4: The printer does not print.

4-1: The Ink Cassette is not oriented properly, or was not pushed all the way in.

4-2: There is slack in the Ink Film.

→ Take up the slack in the Ink Film.

4-3: The Paper Cassette is not oriented properly, or was not pushed all the way in.

4-4: The paper was loaded back and front in the reverse side.

4-5: The internal temperature of the printer is too high.

→ Wait.

5: Printing is not of the expected quality.

5-1: The paper being used is not of the specified type.

5-2: The paper was not loaded correctly.

5-3: Thermal head is dirty.

5-4: Condensation has formed.

→ Wait.

6: The printed colors are not correct.

6: The print image has not been adjusted correctly.

7: The printed pictures are distorted.

7-1: The printer is located near a television, video game, or other source of electromagnetic waves.

→ Move the printer so that it is at least one meter away from the television, video game, etc. Keep away from this type of equipment.

7-2: The printer is located near a stereo speaker, large motor, or other source of a strong magnetic field.

→ Move the printer away from the device generating the magnetic field. Keep away from this type of equipment.

8: The printer does not respond when a button is pressed.

8-1: The internal temperature of the printer is too high.

→ Wait.

8-2: Printing is in progress.

→ Wait until printing is complete.

8-3: The ink cassette which the ink lacks is inserted.

→ Insert a new ink cassette.

9: Paper jams occur frequently.

9-1: More than 36 sheets of paper (or 25 sheets of 4" x 5-7/8" (100 x 148 mm) printing paper) have been loaded in the Paper Cassette.

9-2: The paper is creased or curled.

10: The MENU screen does not appear.

10: Printing is in progress.

→ Wait until printing is complete.

11: It takes a long time for an image to appear.

11: Depending on the image system for storing images in the card and its capacity, it can take 20 to 30 seconds to display the image.

→ This is not a malfunction.

12: It takes a long time for the initial screen to appear.

12: It may take a long time for the initial screen to appear when a lot of pictures are recorded onto the card.

→ This is not a malfunction.

13: The number is different than that selected in [Number], under [OPTION].

13: The printer is performing a DPOF print.

→ Only the number of pages configured with DPOF will be printed.

14: Images stored in a card cannot be copied.

14-1: There are no images stored in the card.

14-2: The INPUT method was not correctly selected.

14-3: The card is write-protected.

14-4: The card's memory has been used up.

15: Images in the card cannot be erased.

15-1: There are no images stored in the card.

15-2: The INPUT method was not correctly selected.

15-3: The picture is set to write-protect in the camera or computer.

→ Change the write-protect setting in the camera or computer, and then erase.

16: The Remote Controller does not operate correctly.

16-1: The batteries are exhausted. Replace with new batteries.

16-2: The remote controller is not facing the Remote Control Sensor.

16-3: There is an obstruction between the Photo Printer and Remote Controller.

17: Printing data remains on PC.

17: Delete the data of the printing job if you do not need it.

To delete the printing job data

•Windows XP

Select [Start] >> [Printers and Faxes].
[Printers and Faxes] may not be displayed depending on the PC used. Select the following orders. [Start] >> [Control Panel] >> [Printers and the other Hardware] >> [Printers and Faxes].
Click the printer icon twice and select [Cancel All Documents] under [Printer].

•Windows 2000

Select [Start] >> [Setting] >> [Printers].
Click the printer icon twice and select [Cancel All Documents] under [Printer].

•Windows 98SE/Me

Select [Start] >> [Setting] >> [Printer].
Click the printer icon twice and select [Delete the Printing Document] under [Printer].

18: Space is made.

18: If the aspect of the picture is different from the one of the paper, space can be made.

19: The picture is cut.

19: If you enlarge the printing range using the application, areas of the original picture may be cut.

I **Error Messages**

- **This function can't be used because there is no picture on the card.**

→ Use a card with images recorded on it.

- **This function is not available because the card can't be used.**

→ An incompatible card is being used. Insert a card that the Photo Printer can use. SD/MMC/CF cards can be used.

- **The illustration is unreadable.**

→ The illustration file is destroyed or does not correspond.

- **This function can't be used because the card is read only.**

→ The card is set to write-protect. Refer to each card's manual for specific instructions on how to remove the card's write-protection.

- **This function can't be used because there is no card.**

→ Insert the card.

- **It can't be deleted because the card is read only.**

→ The card is set to write-protect. Refer to each card's manual for specific instructions on how to remove the card's write-protection.

- **There is no paper cassette.**

→ Insert the Paper Cassette.

- **There is no ink cassette.**

→ Insert the Ink Cassette.

- **Paper is incorrect.
Paper jam has occurred.**

→ Remove the jammed paper, and insert the specified printing paper.

- **Paper jam has occurred.**

→ Remove the jammed paper.

- **Ink cassette is incorrect.**

→ Use the specified Ink Cassette.

- **There is no ink.**

→ Replace the Ink Cassette with a new one.

- **Paper is incorrect.
Set properly.**

→ Insert the specified printing paper correctly.

- **Set paper.**

→ Insert paper into the Paper Cassette.

- **The temperature is too high, please wait.**

→ Wait for a moment.

- **Please wait.**

→ Wait for a moment.

- **The card can't be used.**

→ The card formatted in a computer with FAT32 cannot be used.

Use a card formatted with the Digital Camera.

- **Cannot delete.**

→ Either the files in the card are set to write-protect, or the files are damaged. They cannot be deleted on the Photo Printer.

- **Cannot copy.**

→ Either no images are recorded on the card, or the card is set to write-protect. Use each card to remove write-protection.

- **Cannot record.**

→ An incompatible card is being used. Use a card that is compatible with the Photo Printer.

The following types of cards can be used.

Compact Flash, IBM Microdrive, Memory Stick, Smart Media, SD Memory Card and MultiMediaCard. However, some cards are incompatible.

- **The card is full.**

→ There is no space left on the card. Either erase unnecessary images or use another card.

- **Please wait for a while.**

→ Wait for a moment.

- **This file isn't DCF file.**

→ See page 45.

- **If F00 or other error messages appear, contact your nearest Panasonic dealer.**

Error Messages for Printer Driver

- **Please wait until the temperature of printer decreases.**

→ Please wait for a while.

- **Please check a paper cassette or paper.**

→ Insert the paper into the paper cassette and the paper cassette into this unit.

- **There is no ink.**

→ Insert the new ink cassette.

- **A paper jam has occurred.**

→ Remove the jammed paper and eject/insert the ink cassette.

- **Hardware Error occurred. Please abort printing.**

→ Consult your dealer.

- **The printer is not corresponding to this printer driver. Please abort printing.**

→ Install the driver again.

- **Error occurred. Turn the printer's power off and then back on, and then click [Restart] for printing or click [Abort] to abort printing.**

→ Restart the job or abort printing after turning the Photo Printer off and on.

- **Communication with the printer has failed. First, check that the printer is connected properly, and click [Restart] to start printing or click [Abort] to stop printing.**

→ Turn the Photo Printer's power off and then back on or disconnect and reconnect the USB connection cable. Then restart the job or stop the printing.

- **The selected print size does not match the paper and ink cassette you have inserted.**

→ Confirm that paper corresponding to the ink cassette is set and restart the job.

- **Paper is incorrect. Please set properly.**

→ Insert correct paper and make sure paper is correctly set.

Specifications

Information for Your Safety

Power Supply	AC 120 V 50/60 Hz
Input Current	During Printing: Approx. 1.2 A
Printing System	Thermal sublimation transfer printing system
Printing Speed	4" x 5-7/8" (100 x 148 mm) printing paper: Approx. 85 s/sheet 16 Pre-Cut adhesive paper: Approx. 115 s/sheet 4" x 6" (100 x 150 mm) printing paper without borders: Approx. 130 s/sheet 8 bit, 1 frame (catalog: frame memory, 256 gradations of each color)
Picture Memory	
Print Media	
Ink Film	Cassette type (exclusive), 3 color field successive printing (yellow, magenta, cyan) 4" x 5-7/8" (100 x 148 mm) printing paper (yellow, magenta, cyan), 4" x 6" (100 x 150 mm) printing paper, adhesive paper (yellow, magenta, cyan, overcoat)
Printing Paper	4" x 5-7/8" (100 x 148 mm) printing paper, adhesive paper (100 x 148 mm) 4" x 6" (100 x 150 mm) printing paper (4" x 6-3/4" (100 x 170 mm), 4" x 6" (100 x 150 mm) after cut) (Picture dimensions) 4" x 5-7/8" (100 x 148 mm) printing paper: 3-5/8" x 4-3/4" (90 x 120 mm) adhesive paper: 3-5/8" x 4-3/4" (90 x 120 mm) 16 Pre-Cut adhesive paper: 7/10" x 1" (18 x 24.7 mm) 4" x 6" (100 x 150 mm) printing paper without borders: 4" x 6" (100 x 150 mm) (after cut)
Paper Feeding System	Automatic paper feed (holds 25 sheets of 4" x 5-7/8" (100 x 148 mm) printing paper, 36 sheets of adhesive paper/4" x 6" (100 x 150 mm) printing paper)
Picture Quality	256 gradations of each color
Number of printing pixels	259 x 259 dpi
Number of Copies	Card mode: Max. 10 sheets
Functions	Personal Computer mode: Single Screen, Multiple Screen (Multi Frame) Card Mode: Single Screen, Multiple Screen (Select/Copy), Calendar, Wallpaper Component Print, Title, Character Input, Sepia Print, Zoom, Batch Print/Index, Date Print, Date Search, Trimming, Card Storage, Card Erase, Card Copy, Slide Show, DPOF (Digital Print Order Format), Album
Print Head	Film thermal head, 10,20 dots/mm (259 dpi)
Input Socket	Card: SD Memory Card/MultiMediaCard (Front:1), PC Card (TYPE II) (Front:1) Personal Computer: USB terminal (rear:1)
Output Socket	Image: RCA pin jack (rear:1) 1.0Vp-p, 75 Ω
Compatible Cards	
Cards	SD Memory Card, MultiMediaCard, PC Card (ATA correspondence memory card based on PC Card Standard (TYPE II))
Format	DOS Format
Image Format	JPEG Baseline system (SD-Picture, DCF [Design rule for Camera File system], Exif, JFIF, CIFF, SISRIF), TIFF (no compression) (Baseline TIFF Rev.6.0 RGB Full color Images compatible)
Number of Pixels	80 x 60 (QVGA)~6144 x 4096
Thawing Time	Approx. 10 seconds (1,300,000 pixels)
Compatible	
Personal Computers	IBM-PC/AT compatible personal computer with a Pentium® II, Celeron™ (or compatible CPU) 500 MHz or higher, pre-installed with: Microsoft® Windows® XP Home Edition/Professional, Windows® Me, Windows® 2000 Professional or Windows® 98 Second Edition
Allowable Temperature	Not in use: -4F~131F (-20°C~55°C), In use: 41F~95F (5°C~35°C)
Allowable Humidity	Not in use: 0%~90%, In use: 35%~80%
External Dimensions	Approx. 7-1/8" (W) x 2-11/16" (H) x 11" (D) (180 (W) x 68 (H) x 280 (D) mm)
Weight	Approx. 56.4 oz (1.6 kg)
OS	Windows 98 SE, Windows Me, Windows 2000, Windows XP
Memory	64MB or more
HDD capacity	200MB or more

Limited Warranty (For U.S.A. Only)

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

Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico, Inc.
Ave. 65 de Infantería, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985

PANASONIC SD 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 Sales Company (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
SD Multi AV Device, SD Mobile Printer, Digital Photo Printer (except items listed below)	One (1) year	Ninety (90) days
CMOS Camera Assembly	Six (6) months	Ninety (90) days
Rechargeable Battery Pack (Non-rechargeable batteries are not warranted), SD Memory Card, AC Adaptor USB Reader-Writer (in exchange for defective item)	Ninety (90) 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 carry-in or mail-in your product during the warranty period. If non-rechargeable batteries are included, they are not warranted. 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”. A purchase receipt or other proof of the original purchase date is required for warranty service.

Carry-In or Mail-In Service

For Carry-In or Mail-In Service in the United States call 1-800-211-PANA (1-800-211-7262). For assistance in Puerto Rico call Panasonic Sales Company (787)-750-4300 or fax (787)-768-2910.

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, or commercial use (such as in a hotel, office, restaurant, or other business), rental use of the product, 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 media or images, data or other memory 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 WARRANTY.**

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.

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 (For U.S.A. Only)

For Product Information, Operating Assistance, Literature Request, Dealer Locations, and all Customer Service inquiries please contact:
1-800-211-PANA(7262), Monday-Friday 9am-9pm Saturday-Sunday 9am-7pm, EST.
or send e-mail: consumerproducts@panasonic.com

Web Site: <http://www.panasonic.com>

You can purchase parts, accessories or locate your nearest servicer by visiting our Web Site.

Accessory Purchases:

1-800-332-5368 (Customer Orders Only)

Panasonic Services Company 20421 84th Avenue South, Kent, WA 98032

(6 am to 5 pm Monday - Friday; 6 am to 10:30 am Saturday; PST)

(Visa, MasterCard, Discover Card, American Express, Check)

Product Repairs

Centralized Factory Servicer

MAIL TO :

Panasonic Services Company

1705 N. Randall Road,

Elgin, IL 60123-7847

Attention: SD Products Repair

Please carefully pack and ship, prepaid and insured, to the Elgin Centralized Factory Servicer.

Customer's in Puerto Rico, please ship or carry in to location below ("Service in Puerto Rico").

Service in Puerto Rico

Matsushita Electric of Puerto Rico, Inc. Panasonic Sales Company/ Factory Servicer:

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

Phone (787) 750-4300 Fax (787) 768-2910

As of January 2002

**Panasonic Consumer Electronics Company,
Division of Matsushita Electric Corporation of America**
One Panasonic Way, Secaucus, NJ 07094

**Panasonic Sales Company ("PSC")
Division of Matsushita Electric of Puerto Rico, Inc.**
Ave. 65 de Infantería, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985

Panasonic Canada Inc.
5770 Ambler Drive, Mississauga, Ontario, L4W 2T3



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