DPF-D70

SERVICE MANUAL

Ver. 1.4 2008.11

Revised-4

Replace the previously issued SERVICE MANUAL 9-852-290-14 with this Manual.

US Model
Canadian Model
AEP Model
UK Model
East European Model
Russian Model
E Model
Australian Model
HongKong Model
Chinese Model
Korea Model

SPECIFICATIONS

■ Photo frame

LCD screen
LCD panel: 7 inches, TFT active matrix
Total number of dots: 1 152 000
(800 × 3 (RGB) × 480) dots

Display aspect ratio
15:9

Effective display area
7 inches

LCD backlight life
20 000 hours (before brightness of the backlight being reduced to half)

Maximum decodable file size
100 MB

Input/Output connectors
USB connector (miniB, full-speed) Slots
"Memory Stick PRO" slot
SD memory card/MMC/xD-Picture Card slot
CompactFlash card/Microdrive slot

Compatible image file formats
JPEG: DCF 2.0 compatible, Exif 2.21 compatible, JFIF[*1]
RAW (preview only[*2]): SRF, SR2, ARW (2.0 or lower version)
(Some image file formats are not compatible.)

Maximum number of pixels that can be displayed
8 000 (H) × 6 000 (V) pixels

File system
FAT12/16/32, sector size of 2 048 bytes or smaller

Image file name
DCF format, 256 characters, within 8th hierarchy

Maximum number of files that can be handled
9 999 files for a memory card/an external device

Internal memory capacity[*3]
256 MB (Approx. 500 images[*4] can be saved.)

Power requirements
DC IN jack, DC 12V

Power consumption
7.7 W

Operating temperature
5 °C to 35 °C (41 °F to 95 °F)

Dimensions
[Without the stand]
Approx. 207 × 137 × 38.5 mm (8 1/4 × 5 1/2 × 1 9/16 inches)
(width/height/depth)
[With the stand spread out]
Approx. 207 × 137 × 125 mm (8 1/4 × 5 1/2 × 5 inches)
(width/height/depth)

Mass
Approx. 550 g (1 lb 3 oz) (excluding the AC adaptor)

Included accessories
• Digital photo frame
• Remote control
• AC adaptor
• Operating Instructions
• Warranty
(In some regions, the warranty is not supplied.)

■ Supplied AC adaptor

Power requirements
~100 V to 240 V, 50/60 Hz

Rated output voltage
⎓ 12 V 1.2 A

Dimensions
Approx. 34 × 72 × 69 mm (1 3/8 × 2 7/8 × 2 3/4 inches)
(width/height/depth) (excluding the protruding parts)

Mass
Approx. 110 g (4 oz)
See the label of AC adaptor for more details.

Design and specifications are subject to change without notice.

*1: Baseline JPEG with 4:4:4, 4:2:2, or 4:2:0 format

*2: RAW files are displayed as thumbnail preview.

*3: The capacity is calculated as 1 MB is equivalent to 1 000 000 bytes. The actual capacity is reduced as files for management and applications are included.
Approx. 200 MB can be used for your actual operation.

*4: Approximate number is shown when the images taken by 1 500 000 pixels equivalent camera are saved.
The value may vary depending on the shooting condition.

DIGITAL PHOTO FRAME

SONY®

DPF-D70
9-852-290-15

Sony EMCS Co.

2008K0200-1
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Published by Kohda TEC

MAIN FEATURES

The Sony DPF-D70 is a digital photo frame for easily displaying images taken with a digital camera or other device without using a computer.

■ **Support for various memory cards**

Supports various memory cards used by digital cameras and other devices, such as a "Memory Stick", CompactFlash card, SD memory card, and xD-Picture Card™.

Just insert a memory card removed from a digital camera or other device, then you will be able to view the images immediately.

■ **Various modes**

The displayed image can be switched automatically as though you are turning the pages of an album yourself.

You can select from various modes including just images, clock, and calendar view.

You can also change playback settings such as the display order.

■ **Various display functions**

You can enjoy various view modes, such as displaying an analog clock, digital clock or calendar. And the photo frame can display images on single image display, index display, zoom in/zoom out or fit to screen mode.

■ **Automatic rotation of images**

The photo frame automatically rotates images to their proper orientation. Images are also automatically rotated when the photo frame is set in either the portrait or landscape position.

■ **Easy operation by remote control**

■ **Adding images to internal memory**

The images you add to the album are saved to internal memory.

■ **Exporting images**

You can export images in the album to your memory card.

■ **Connecting to a computer to exchange the images**

SAFETY CHECK-OUT

After correcting the original service problem, perform the following
safety checks before releasing the set to the customer.

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.

2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.

3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.

4. Look for parts which, through functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.

5. Check the B+ voltage to see it is at the values specified.

6. Flexible Circuit Board Repairing
   • Keep the temperature of the soldering iron around 270˚C during repairing.
   • Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
   • Be careful not to apply force on the conductor when soldering or unsoldering.

Unleaded solder

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)

⚑ : LEAD FREE MARK

Unleaded solder has the following characteristics.

• Unleaded solder melts at a temperature about 40°C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350°C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!

• Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.

• Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.

SECTION 1
EXPLODED VIEWS

NOTE:
• -XX and -X mean standardized parts, so they may have some difference from the original one.
• Items marked "∗" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
• The mechanical parts with no reference number in the exploded views are not supplied.

ns: not supplied

• Abbreviation
AUS : Australian model
CH : Chinese model
CND : Canadian model
EE : East European model
HK : Hong Kong model
KR : Korea model
RUS : Russian model
TW : Taiwan model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
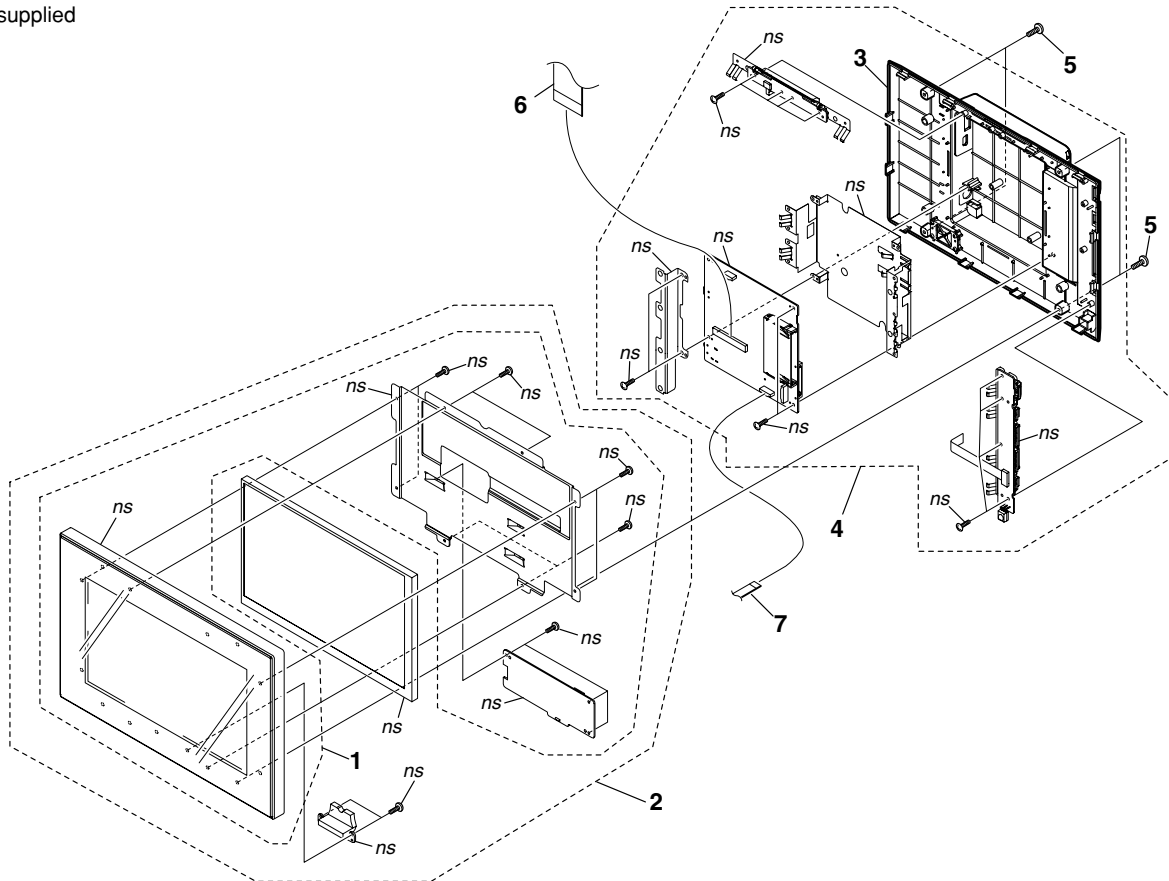
Ref. No.	Part No.	Description	Remarks
1	A-1546-161-A	CASE ASSY, FRONT (BLACK)	
1	A-1560-426-A	CASE ASSY, FRONT (RED)	
1	A-1560-428-A	CASE ASSY, FRONT (BROWN)	
2	A-1546-160-A	CASE BLOCK ASSY, FRONT (BLACK)	
2	A-1560-425-A	CASE BLOCK ASSY, FRONT (RED)	
2	A-1560-427-A	CASE BLOCK ASSY, FRONT (BROWN)	
3	A-1546-163-A	CASE,ASSY, REAR	
4	A-1546-162-B	CASE BLOCK ASSY, REAR	
5	3-080-206-41	SCREW, TAPPING, P2	
6	4-115-829-01	SERVICE FFC (54 PIN)	
7	4-115-828-01	SERVICE FFC (10 PIN)	

< ACCESSORIES >

Ref. No.	Part No.	Description	Remarks
	1-480-757-11	REMOTE COMMANDER (RMT-DPF1) (REMOTE CONTROL)	
	3-300-258-11	MANUAL, INSTRUCTION (ENGLISH) (EXCEPT CH, TW, KR)	
	3-300-258-21	MANUAL, INSTRUCTION (FRENCH) (CND, AEP)	
	3-300-258-31	MANUAL, INSTRUCTION (GERMAN) (AEP)	
	3-300-258-41	MANUAL, INSTRUCTION (DUTCH) (AEP)	
	3-300-258-51	MANUAL, INSTRUCTION (ITALIAN) (AEP)	
	3-300-258-61	MANUAL, INSTRUCTION (SPANISH) (AEP, E)	
	3-300-258-71	MANUAL, INSTRUCTION (PORTUGUESE) (AEP, E)	

| Ref. No.	Part No.	Description	Remarks
	3-300-258-81	MANUAL, INSTRUCTION (RUSSIAN) (EE, RUS)	
	3-300-258-91	MANUAL, INSTRUCTION (UKRAINIAN) (EE, RUS)	
	3-300-259-11	MANUAL, INSTRUCTION (ARABIC) (E)	
	3-300-259-21	MANUAL, INSTRUCTION (PERSIAN) (E)	
	3-300-259-31	MANUAL, INSTRUCTION (KORIAN) (KR)	
	3-300-259-41	MANUAL, INSTRUCTION (SIMPLIFIED CHINESE) (HK, CH)	
	3-300-259-51	MANUAL, INSTRUCTION (TRADITIONAL CHINESE) (HK, TW)	
⚠	3-876-557-01	SERVICE PARTS AC (AC-P12V1) (AC ADAPTOR) (US, CND, TW)	
⚠	3-876-699-01	SERVICE PARTS AC (AC-P12V2) (AC ADAPTOR) (UK, HK)	
⚠	3-876-700-01	SERVICE PARTS AC (AC-P12V3) (AC ADAPTOR) (AEP, EE, RUS, E(Central and South America, Middle East))	
⚠	3-876-701-01	SERVICE PARTS AC (AC-P12V4) (AC ADAPTOR) (AUS)	
⚠	3-876-702-01	SERVICE PARTS AC (AC-P12V5) (AC ADAPTOR) (CH)	
⚠	3-876-703-01	SERVICE PARTS AC (AC-P12V6) (AC ADAPTOR) (KR)	
⚠	3-876-704-01	SERVICE PARTS AC (AC-P12V7) (AC ADAPTOR) (E(Southeast Asia))	

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SECTION 2
FIRMWARE UPGRADE

2-1. METHOD OF UPGRADE OF FIRMWARE

Please executes when the enhance (upgrade of the firmware) is necessary.

Procedure

1. Download the latest firmware from the ESI homepage.
2. Copy the firmware (downloaded and decompressed two files) onto the root directory (most significant hierarchy) of the Memory Stick of 8MB or more empty capacity.
3. Install Memory Stick in the Memory Stick slot of this unit before turning on the power supply.
4. Connect AC adaptor of accessory with this unit and push the power button while pushing the [VIEW MODE] button.
5. The screen becomes the confirmation display whether to do the upgrade of the firmware.
   Push the [ENTER] button.
6. The upgrade of the firmware starts.
   The power supply cuts automatically when ending.
7. Remove Memory Stick from this unit.

2-2. CONFIRMATION OF VERSION AND DESTINATION LANGUAGE SETTING

1. Turn on power pushing the power button.
2. Display the menu screen pushing the [MENU] button.
Note: When the demonstration mode display is in the screen, make it to "Date/time setting" display pushing the [MENU] button after the [🕐] button of remote control.

3. Choose "Various settings" with [⬇] button, and push the ENTER button.

4. Choose "System Information" display with [⬇] button, and push the ENTER button.
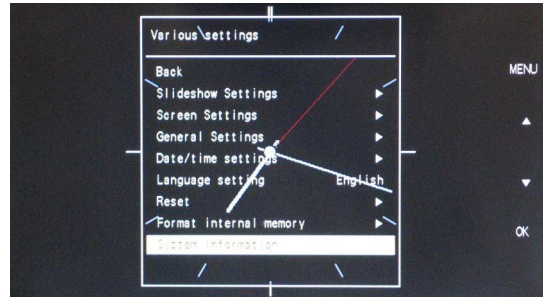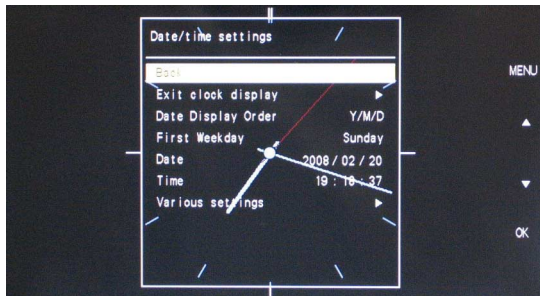
5. Confirm it is a hoped firmware version, and push the [ENTER] button.
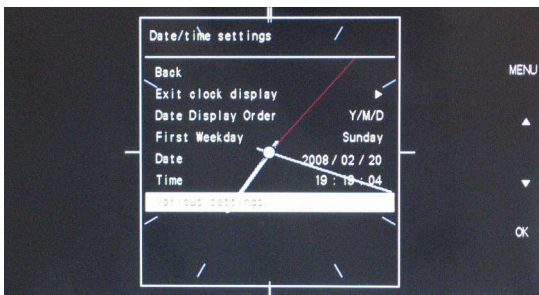
6. Confirm whether it is a display language that corresponds to destination.
   To change language, choose "Language settings" and push the ENTER button.

Destination	Language
Except E33, EE, RUS, CH, TW	ENGLISH
E33	SPANISH
EE, RUS	RUSSIAN
CH	SIMPLIFIED CHINESE
TW	TRADITIONAL CHINESE

7. Choice language and push the ENTER button.
   To erase the menu display, pushing the MENU button.

• Abbreviation
  E33 : Central & South America model
  CH   : Chinese model
  EE   : East European model
  RUS : Russian model
  TW   : Taiwan model

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2-3. FORMAT INTERNAL MEMORY

NOTE
• All the images added to the internal memory will be deleted.
• Do not format the internal memory by using connection to PC or
  other external devices.

1. Turn on power pushing the power button.
2. Display the menu screen pushing the [MENU] button.
Note: When the demonstration mode display is in the screen, make it to
   "Date/time setting" display pushing the [MENU] button after the [🕒]
   button of remote control.
3. Choose "Various settings" with [⬇] button, and push the [ENTER]
   button.
4. Choose "Format internal memory" display with [⬇] button, and push
   the [ENTER] button.
5. The screen of "Format internal memory? All images will be deleted."
   appears.
   Choose "Yes", and push the [ENTER] button.
6. The screen of "Format internal memory completed." appears.
   Choose "Yes", and push the [ENTER] button.

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Revision History

Ver.	Date	History	Contents	S.M. Rev. issued
1.0	2008.02	Official Release	—	—
1.1	2008.03	Revised-1	• Change of EXPLODED VIEWS S.M. Revised: Page 3	Yes
1.2	2008.04	Revised-2	• Change of EXPLODED VIEWS S.M. Revised: Page 3	Yes
1.3	2008.05	Revised-3	• Addition of red and brown models S.M. Revised: Page 3	Yes
1.4	2008.11	Revised-4	• Addition of two FFCs S.M. Revised: Page 3	Yes

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