

# DIGITAL CAMERA

## SONY MAVICA MVC-FD81

### **FEATURES:**

- Takes digital images and saves to 3.5" floppy disk.
- Takes digital video clips (up to 60 sec.).
- Instant review on camera's LCD panel.
- Records sound clips.
- LCD screen provides better viewing opportunities.
- Variety of picture effects and enhancements.

### **REQUIRES:**

- 3.5" Floppy disk (High Density)
- Charged Battery

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### **GETTING STARTED (A Preview):**

#### **BATTERY:**

##### **To Install,**

- Turn camera upside down to see bottom.
- Locate button under "OPEN(BATT)".
- Push button toward center of camera and then toward front of camera.
- Battery cover will slide out and lift up.
- Take Sony Battery Pack and insert so that ▼ is pointing down.
- Push down until pack locks in place.
- Push cover down and in to close.

##### **To Remove,**

- Open cover in same way as above.
- Pull gray clip on top of battery pack toward center of camera to release.
- Pull battery out and close cover.

##### **To Charge,**

- Plug power cord into Sony Battery Charger and plug cord into normal outlet.
- Put flat side of battery down on charger so that Sony logos match up.
- Pull battery in the direction of ▼ until it locks.
- Orange charge light should come on.
- Charge until light goes off. (Let sit for one more hour to get max. charge.)
- Remove battery from charger. It is now useable again.

**(NOTE: Battery should be removed from camera when not in use.)**

#### **INSERT FLOPPY DISK:**

- Take floppy disk in hand so that the label is facing up.
- Hold camera so that back is facing up.
- Insert disk into slot on right side of the camera (like a floppy drive on a PC).

##### **To Remove Disk:**

- Locate DISK EJECT on lower right corner of back of the camera.
- With left hand, push and hold the button that says PUSH.
- With right hand, slide bar that says DISK EJECT to the left.
- Disk will eject out of right side of camera.

#### **TURN POWER ON:** (With battery and disk installed)

- Locate button on right side of LCD screen that says POWER ON/OFF.
- With finger pressing down on the green safety in the middle of the button, slide power button toward bottom of camera and release.
- LCD screen should light, as well as the green power indicator light.

##### **Turn Power Off:**

- Repeat the above steps.

**(NOTE: The camera may automatically turn power off if left on, unused, for about one minute. Follow the above instruction to turn back on.)**

## TAKING STILL PICTURES:

### Still Mode:

- Locate slide button under the Sony logo on the back of the camera.
- Slide button until left mark is lined up with STILL.

*(Reminder: Always return the button to this position when wanting to take stills!)*

### Locate Image:

- With the camera in Still Mode, use the LCD display to locate and frame your subject.
- To zoom in and out on an object, slide the button in the upper right corner of the camera with the W and T (toward W to make the view wider and T to make the view tighter).

*(NOTE: If you only see a black screen, make sure the lens cap is off!)*

### Take Image: *(Once you have image located)*

- With your right hand, press the gray button on the top-right of the camera. (Just like any camera.)
- On the LCD, the image will freeze and it will display RECORDING in the middle of the screen.
- Once the image is done saving to disk, you are ready to take another picture.

## TAKING VIDEO CLIPS:

### Movie Mode:

- Locate slide button under the Sony logo on the back of the camera.
- Slide button until right mark is lined up with MOVIE.

### Taking Video:

- In Movie Mode, locate subject as described in Still Process.
- Press the Gray button on the top of the camera (as in Still Process).
  - 1) If you press and release, the camera will default to taking a 5 second video.
  - 2) To take video of custom length, hold the button down to start recording and then let up when you want to stop recording.
- On the LCD, the image will freeze and it will display RECORDING in the middle of the screen.
- Once clip is done saving, you can continue to take more movies.

## VIEW SAVED ITEMS:

### Play Mode:

- Locate slide button under the Sony logo on the back of the camera.
- Slide button until left mark is lined up with PLAY.
- Use on-screen displays to view images. *(See Below)*

## ON-SCREEN DISPLAY:

### The "Mouse":

- Locate the large round button under the LCD display on the back of the camera with the directional arrows. This is the camera's On-Screen Control Button.
- To move your selection tool up, press on the top of the button. Do the same for left, right, and down.
- To enter on a selection, press squarely in the middle of the Control Button as if clicking a mouse.

### Turning On/Off Display:

- To turn the function displays on and off on the LCD panel, press the DISPLAY button next to the control button. This toggles the display on and off.
- By default, the LCD viewer will display all the different functions on the screen.

### Icons Always Present:

- **BATTERY:** In the lower-right corner is a battery icon that tells you how much more time you have left on your current charge. The time may change based on which mode you are in. **(NOTE: An icon of a battery with a line through it will flash when your battery is too low.)**
- **DISK SPACE:** In the upper-right corner is a circle icon. The white space of circle is a pie chart-like display of disk space left on the current disk.
- **IMAGES TAKEN:** Next to the disk space icon is a number. This is the number of images and movies on the current disk.
- **MENU:** In the bottom-left corner is the menu option. By clicking on this block, you can access menu options that are different for each mode.  
**Below is a description of each.**

## **STILL Mode:**

### **Menu Options:** *(from top)*

- CLOCK SET – Sets clock time (Users should leave this for technicians to set.)
- BEEP – Toggles action sounds on and off.
- DISK TOOL – Allows users to FORMAT and COPY disks in the camera.
- FILE NUMBER – NORMAL will reset the numbering of files for each disk. SERIES will continue to number files in order even if a new disk is used.
- FLASH LEVEL – Will make the flash more or less intense.
- IMAGE SIZE – Will toggle between 640x480 (small) or 1024x768 (large). The larger the image, the few images that can be saved on a disk. See TIPS and TRICKS at the end for more info.
- QUALITY – Will toggle between FINE (best image) and STANDARD (recommended).
- RECORD MODE:
  - 1) NORMAL will save as JPG image format (recommended).
  - 2) BITMAP will save a BMP image format, which can be x10 larger than JPG but will open on any Windows computer.
  - 3) VOICE will record audio with the image taken. Once this mode is selected, setup to take a normal picture, but hold down on the shutter button. Once the shot is snapped, it will begin to record a sound clip to go with the image. Release the button when finish recording. If you just click the shutter button, the camera will default to a 5-sec. message. *(See Viewing Images for retrieving sound clips.)*
  - 4) E-MAIL will record two images, one normal and one small for easy e-mailing. It will save the second image in a special E-mail folder, but will not create a new message! *(See Viewing Images)*

### **On-Screen:**

- EXPOSURE – Above the MENU are “-EV” and “+EV”. Choosing –EV reduces picture exposure and +EV increases exposure.
- TIMER – The icon to the right of MENU is a delay timer. Once selected, press to take picture and the camera will snap the shot in 10 sec. allowing you to get in the picture.
- RES/QUALITY – Next to the disk space icon at the top, the camera will tell you what resolution and image quality you have selected. Use the MENU option to change these settings.

## **MOVIE Mode:**

### **Menu Options:** *(from top)*

- CLOCK SET – Same as STILL MODE.
- BEEP – Same as STILL MODE
- DISK TOOLS – Same as STILL MODE
- FILE NUMBER – Same as STILL MODE
- IMAGE SIZE – Similar to Still Mode, but about 1/3 the size. Video images are smaller to conserve on disk space.

### **On-Screen:**

- Similar to STILL MODE
- RECORDING INDICATOR – Under the Disk Space icon are 5 dots. When recording video, the dots will turn white and red, REC will display, and the total record time is displayed below.

## **PLAY Mode:**

### **Menu Options:** *(from top)*

- CLOCK SET – Same as STILL MODE.
- BEEP – Same as STILL MODE
- DISK TOOLS – Same as STILL MODE
- DELETE – When selected, it will delete the current displayed file from disk. Confirm the delete action.
- COPY – Will make a copy of the current image.
- PROTECT – Will protect the file from being deleted or changed. The protection must be turned back off before the image can be deleted.

### **On-Screen:**

- FORWARD/BACKWARD – Click on the left and right arrow buttons above the menu to scroll forward and backward through the current images on the disk. The file will access from the disk and then be displayed on-screen.
- INDEX – The index button, next to MENU, will display up to 6 thumbnail views of the images on the disk. Use the left and right arrows at the bottom to scroll forward and back. The red arrow next to the image number displays the active image and you can scroll to other images to display info and select to see full image.
- PLAY BUTTON *(Video Only)* – The play button next to Index will play the video clip on-screen with sound.
- INFO – Above the battery, information about the current image will be displayed.

## **ADVANCED FEATURES:**

### **FLASH:**

- Press the FLASH button under the display panel (in STILL/MOVIE mode) to toggle flash settings.
- MANUAL ON -- Press button once to get “lighting bolt” icon at top of screen. This will force the camera to flash.
- MANUAL OFF – Press button once more to get “bolt with cross-out” icon at top. This will prevent the camera from flashing.
- AUTO – Press again and icons will disappear. The camera will determine weather it needs flash or not.
- See TIPS and TRICKS for flash use.

### **PROGRAM:**

- Press the PROGRAM button to the left of the Display button. This controls the camera auto image enhancements to fit the current environment.
- PORTRAIT – Press once when taking portrait pictures of people and colorful objects.
- ACTION – Press twice when taking fast moving action shots.
- STRONG LIGHT – Press three times for pictures taken with strong sun, like beaches and skiing.
- LOW LIGHT – Press four times for pictures taken with poor light, like sunsets and night views.
- LANDSCAPE – Press five times for pictures taken of distance objects or when taking through windows.
- PANFOCUS – Press six times when you need to quickly focus between close and distance objects or when using flash in the dark.
- DEFAULT – Press again to return to the default screen with no program icon.
- These programs can be used in either STILL or MOVIE modes.

### **PICTURE EFFECT:**

- Press the PICTURE EFFECT button to the left of the Program button. This offers different image effects that do not require additional processing.
- These effects can be used in either STILL or MOVIE modes.
- NEG.ART – Inverses the colors so light shows dark and visa-versa.
- SEPIA – Similar to black & white, but uses rose & white. Great for that old western look.
- B & W – Standard black and white image.
- SOLARIZE – Gradates colors in the image to give it a more illustrated look.

- Note: Once images have been taken with an effect, they can not be reversed. Additional software is available to do these same effects in post-production.

### **MANUAL FOCUS:**

- If you desire to manually control the focus, slide FOCUS button, located on left side of camera next to the lens, down to MANU.
- To focus the lens, move ring around lens of camera left or right until you have proper focus.
- To return camera to AUTO-FOCUS, move focus button up to AUTO. (Please return button to this position after each use.)
- When the camera is in manual focus, a white hand and with an “F” will appear in the top on the display screen. When focusing, a dot with an arrow will also appear. When there are two arrows flanking the dot, the camera feels the image is in focus.

### **VOLUME:**

- The camera has a volume control on the left side of the display screen. This controls only the speaker inside the camera, not the recording volume.

### **LCD BRIGHTNESS:**

- To make the LCD screen brighter or darker, use the BRIGHT button to the left of the display.
- NOTE: PLEASE, leave this adjusting to a technician. Mis-adjustments could cause incorrect results in images!

### **LCD BACKLIGHT:**

- To conserve on battery power, you can turn the display screen light off by moving the LCD BACKLIGHT button, to the left of the screen, to OFF. If you have enough light, such as outdoors in the sun, the LCD “skylight”, located on the top of the camera, can light the screen somewhat. The camera will continue to take images when this feature is active.

### **MISCELLANEOUS:**

- MICROPHONE – The microphone is located on the top of the camera labeled MIC.
- RECORDING LIGHT – There is a light below the flash that will turn red when the camera is recording a STILL or MOVIE. The light will flash when camera is set for timed delay.
- TRIPOD MOUNT – The bottom of the camera contains a mounting slot to attach the camera to a standard tripod.

## VIEW IMAGES ON THE PC

### ACCESSING DISK:

- Insert disk into floppy drive in computer.
- Access the floppy drive by double-clicking “My Computer” and double-click “A:\ Floppy Drive”.
- You may notice a few different file types (assuming you started with a blank disk).
- All items taken with the Mavica camera will start with “Mvc-” followed by a number.
- Each image will have two items with it. The first one will end with “.411” and is just an information file for use by the camera only. This file can be deleted once you no longer need to access images via the camera.
- The second image is the actual image/movie file, normally ending in .JPG (Image) or .MPG (Movie).

### WEB BASED VIEWING:

- The first file on the disk should be “Mavica.htm”, a web based index of the files on the disk.
- To easily view images and movies you have taken, double click to open this file.
- Now you can click on an image name to have you web browser display the image or movie.
- Click <Back> to go back to index. Click <Reload> to view another disk. Closer browser when done.

### IMAGES:

- JPG images can be viewed in most newer image programs and any web browser.
- If your computer does not open the image when double clicking on the file, use the above web based interface to view you images.
- If you have a computer that has an older operation system, such as Win 3.1, you should record your images in BMP form.

### MOVIES:

- Movies can be viewed just like Images (please see above).
- If you have a computer that has an older operation system, such as Win 3.1, you may need to install additional software.

### SOUND:

- If you recorded sound with your image, you will have two files to access.
- In the main directory of your disk, you will find a plain JPG image that you took.

- Open the folder called “SOUND”. Here you will find a MPG file with a corresponding file number. When you open this file, you will see the image you took and hear what you said.

### E-MAIL:

- The camera will store a normal size image in the root directory of the floppy disk.
- Open the folder “E-MAIL” and you will find a smaller, corresponding file. This is the file that you should attach with your E-mail.
- The E-mail folder makes it easy for you to remember and locate the images you wanted to send to others. Once you have sent these files, you can delete the folder and keep the original image.

## MAINTENANCE

### CARE:

- Wear shoulder strap at all times to prevent dropping camera.
- Keep camera in case when not in use to prevent damage.
- Remove battery pack during periods of storage.
- Keep camera out of the elements; direct sun, damp weather, freezing temperatures, or dusty environments.
- Keep camera away from magnets or magnetic devices (TV, speakers, electric motors).

### CLEANING:

- LCD PANEL – Wipe with lint-free cloth. Use mild soap and water when needed.
- OUTSIDE SURFACES – Wipe with soft cloth moistened with water.
- INTERIOR – Do not attempt to clean the inside of the camera. Let a technician know of any problems that need to be addressed.
- DO NOT use alcohol or other cleaning solvents on the camera.

### TROUBLESHOOTING:

- If the above info does not help with a problem, consult the “Troubleshooting” guide in the back of the camera manual.
- If this guide does not help, please ask a technician for additional help. DO NOT attempt to make repairs yourself!

## **TIPS & TRICKS**

### **IMAGE SIZE:**

- The smaller the image, the less disk space required and the more images one can get on a disk.
- Large images should only be taken when needed for professional publishing.
- Screen size comparison (average screen): 640x480 – 1.5” border around image. 1024x768 – 1.5” border OFF the screen.

### **RESOLUTION:**

- Resolution is the number of dots per inch. (Similar to a picture in the newspaper.)
- Fine resolution takes up dome disk space, thus less images on a disk.
- Fine resolution should only be used for professional publishing. Standard is more than adequate for viewing on screen.

### **FLASH:**

- Flash is only good for object about 3-20 feet away.
- When taking images of distant objects at events such as a night game, manually turn off the flash. Leaving the flash on will light the subject, but rather someone’s head in front of you.
- When taking pictures of extremely close objects, turn off the flash and try to use a secondary light source. The flash will more than likely white out the subject.
- If you are trying to take a picture of a dark object in a bright environment, manually turn ON the flash. An example would be a pet in a box outside on a sunny day.
- When taking pictures through or toward glass and mirrors, turn the flash off. If the subject is too dark to see, find a means to avoid glass surfaces, otherwise your subject will be washed out my the reflection of light.

### **DISKS:**

- Take plenty of disks with you. Even though one disk can hold a lot of images, you may find that you desire to take special images or movies, which can quickly eat of space. Better safe than sorry.
- LABEL DISKS: Make sure to label your disk with subject matter that you have taken. Also, include you name and means of returning the disk, in case you leave it somewhere.
- BACKUP: Floppy disks are not made to take a lot of abuse or store long term data. It is recommended to back-up images to a more permanent source if you would cry if the image was lost.

## **OTHER NOTES:**