

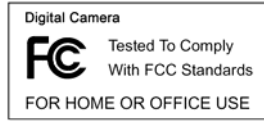


Digital Film & Slide Converter User's Manual
FC-C520-VP

For customers in North and South America

For customers in USA

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.

(2) This device must accept any interference received, including interference that may cause undesired operation.

For customers in Canada

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

For customers in Europe

"CE" mark indicates that this product complies with the European requirements for safety, health, environment and customer protection. "CE" mark cameras are intended for sales in Europe.



U.S. PATENT PENDING

1. System Requirements

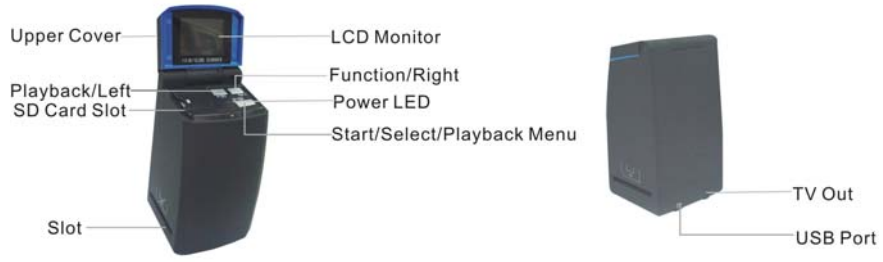
- Personal computer, laptop, desktop or IBM compatible with Pentium 166 MHz minimum, and with an active USB (Universal Serial Bus) port.
- Windows 98SE (Driver needed), Windows ME / 2000 / XP, Vista 32/64-bit, Mac10.4 or above, CD ROM drive, color monitor, mouse and keyboard.
- When using ArcSoft PhotoImpression program, the computer needs the following requirements:
 - Pentium III 450 processor or equivalent (Pentium III 800 recommended)
 - 128 MB of RAM (Minimum), 50 MB available hard disk space (minimum), 800x600 pixels 16-bit color monitor
 - Microsoft Windows Media Player 9.0 or higher
 - Microsoft DirectX 9.0 or higher (included on installer)

2. Package Contents

Make sure these items are included in your package:

- Film Converter
- USB cable
- CD-ROM for Arcsoft Software
- User's Manual
- Video cable
- Adapter
- Positive Slide Holder
- Negative Film Holder
- Cleaning Brush

3. Name of parts



We suggest using a clean, dry, cotton swab to clean the glass lens in the film converter periodically. This is to ensure clear converted images.

Please make sure your negative/slide and holder are clean before inserting into the converter. Dust or dirt on the negative/slide or holder will affect the quality of your converted images.

4 Installing slides and negatives into the holder

a. Open the negative/slide holder as illustrated.



b. Put a negative/slide in the negative/slide slots as shown.

Note: The negative/slides should be put in motion side down.



c. Close the negative /slide holder tightly by snapping the middle and sides shut.



5. Inserting and removing the SD card (optional)

• Insert the SD card before plugging in the converter.



- The 32MB built-in memory will not be used if the SD card is inserted.
- Close the cover and connect the converter with the USB cord to the adapter. Then plug the adapter to an outlet and open the cover to turn the converter on.

Note: Inserting a SD card during operation will cause the converter to turn off.

6. Quick Start

Connect the USB cord to the converter and the adapter. See picture below for further reference:



Plug the adapter in to a power source. Open the cover. The converter will turn on and the power LED light will glow red. Insert the slide or negative tray into the scanner and move the tray carefully to adjust the film. You will be able to see the picture on the LCD monitor. Press the Start button to capture a picture.



Powering On/Off:

- Power On: Open the cover. The converter will turn on and the power LED light will glow red.
- Power Off: Close the upper cover until cover clicks.



Select Function

- Press the Function button  to enter the function menu.



Press the Left  or Right buttons  to select the function you wish to use.


- Home 

Press the Start button  to return to capture mode.


- Film Type 

To change the Film Type, you can use the Left  or Right buttons  to navigate the function menu, press the Start button  to enter.


Slide:  Select the Slide mode when scanning colored slides. Press the Start button  to confirm selection.

Monochrome:  Select the Monochrome mode when scanning black and white negatives.

Press the Start button  to confirm selection.

Negative:  Select the Negative mode when scanning colored negatives. Press the

Start button  to confirm selection.

- Format 

To enter the Format mode, press the Left  or Right  buttons to select, and press the Start button  to enter.

Select "do not format" (X) or "format" (✓).

Then press the Start button  to confirm your selection.


Caution: Formatting will delete all files on internal memory as well the on the SD card. Formatted files cannot be recovered!




- TV Output 

Connect the converter to a TV with the video cable provided for optional viewing purposes. If you connect the converter to a TV, the images on the LCD monitor will not appear.

NTSC: Sets the TV Output to NTSC. (Video format in America and Asia)

PAL: Sets the TV Output to PAL. (Video format in Europe)




- Exposure Value 

To enter the Exposure Value mode, press the Left  or Right  buttons to select, and press the Start  button to enter.




Exposure compensation allows you to change the exposure setting manually to adjust the lighting. This feature helps to achieve better results when scanning a photo with high color contrast.

- The exposure value can be adjusted in 1/2 steps within the range -2EV ~ +2EV.
- You can check the result of the compensation by viewing the image on the LCD monitor.


- Mirror 

Press the Left  or Right  buttons to select the icon on the screen, and press the Start  button to confirm the type of mirror image you want. Press the Start button to capture the picture again. The end result will be a mirror image of the original negative or slide.



Review Images (Playback)

Press the Playback button  to enter the playback mode to review your converted images. Press the Left  button or Right  buttons to select the next or previous converted image.

Playback Menu

Once in Review Playback mode, press the Start/Playback menu  button to enter the Playback Menu mode.

You will see these icons on the screen.


Press the Left  or Right  buttons to select from these features:

Single display, Slideshow, Delete single, Delete all, Rotate 90° left, Rotate 90° right, and Exit.






- Display Single Image 


When you select the  icon, press the Start  button to confirm your selection. Press the Left  or Right  buttons to review the next or previous converted image.



- Slide Show 

Use the Slide Show feature to display your converted images on the LCD screen of your converter. Once the Slide Show mode is selected, the converter will automatically play all the images that you saved in the internal memory or the SD card you have inserted. The slide show will not play the images in the internal memory and the SD card at the same time. Press any button to stop the slide show and return to the menu.



- Delete Single Image 

Select the  icon to delete the current image shown on the LCD monitor. Press the Start button  to confirm your selection.



- Delete All Images 

Select the  icon to delete all of the stored images from the internal memory or SD card. Press the Start  button to confirm your selection. Files that are erased cannot be recovered. Make sure you select the image(s) you wish to delete only.



- Rotate 90 ° Left 

Select the  icon to rotate the image by 90° in a counter clockwise direction. Press the Start button  to confirm your selection.

- Rotate 90° Right 

Select the  icon to rotate the image by 90° in a clockwise direction. Press the Start button  to confirm your selection.

- Exit 

Select the  icon, and press the Start button  to exit the playback menu.

7. Downloading Images to Your Computer

When the converter is connected to the computer with the USB cable, the "USB Mass Storage driver" will appear on the computer screen.

Note: For Windows 98SE users, please install the driver before connecting the unit to the computer.

Please remember to save the images to your computer. Viewing images on your computer does automatically save them to your computer.



For Windows 98 SE users:

1. Install the "scanner driver" from the software CD provided for Windows 98SE.
2. Then connect the converter to the computer with the USB cable.
3. "USB Mass Storage drive" will appear on the computer screen.

For Windows XP users:

A dialogue box with options should appear as shown on the right.

The options are Play, Find/Fix/Share Images, Open folders to View files, Take no action, Copy images to a folder on My computer,



For Windows 2000/ME users:

Double click on "My computer", and then double click on Removable Disk (i:). The Removable Disk that shows up in "My computer" depends on your computer so it may differ. All of the photos are stored in the DCIM folder.

For SD Memory Card Readers (optional):

If you have a SD memory card reader for your computer, you can put images on to your computer without the driver. Just plug the SD memory card reader to your computers USB port and then insert the SD card in to the SD card slot on the card reader.

Then you should be able to get the data off of the SD card like you normally do when using your SD memory card reader.



Viewing Pictures on the Television (optional):

If you would like to view converted images on your television you must use the video cable included. Plug the black end of the cable in to your converter and the yellow end of the cable to the television video input.

Make sure that the converter is plugged in to the power source. Turn on the television, change the input on the television and turn on the converter. You should see what would normally be displayed on your converter screen displayed on your television screen instead.



8. Installing the ArcSoft software (Windows XP and Vista users only)

• Installing the software

1. Insert the installation CD into the CD-ROM drive and the installation CD menu should appear.

2. When you see the following screen,

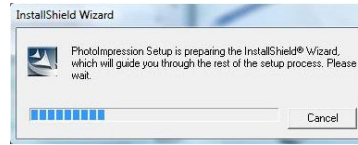
Choose **"Arcsoft Software Suite"** to install the software.

Windows XP and Windows Vista directions:

1. Select the language you wish to be

2. PhotoImpression will start the installation.

displayed. Then click OK.

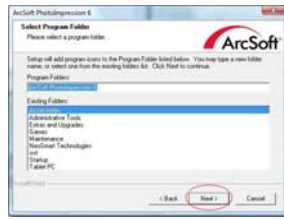


3. Click on Yes to agree to the terms and conditions.

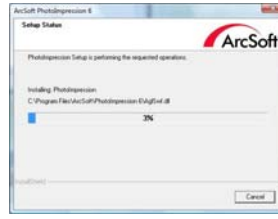
4. Click Next to have PhotoImpressions download into your Programs folder.



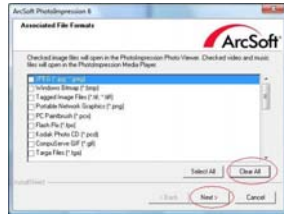
5. Click Next to continue.



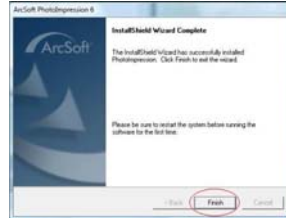
6. PhotoImpressions will start the setup process.



7. Once you get this to this screen select "Clear All" so that PhotoImpression does not take over the files on your computer.



8. Click on Finish to complete installation.



9. Remove the installation disk and restart the computer.

The installed software will automatically create a "PhotoImpression 6" logo on your desktop.

9. Editing pictures:

Click on the "PhotoImpression 6" icon on the desktop. Click on the picture you would like to edit, then click on Edit next to Get Photos and select Photo Editing tools.



Use the left toolbar to navigate and find your pictures to edit.

- Main Menu

The Main Menu appears in the upper left corner of the workspace many of the program's key options and controls are available in the Main Menu. To learn more about a particular menu item and the options and controls it contains, choose from the list below:

* File

Scan for Media Files

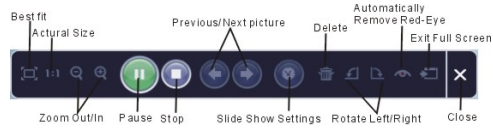
Launches the Scan for Media Files dialog box that enables you to scan your computer for all photos, music and video files. This process creates a media library that helps the program perform as fast as possible. You can scan your computer in one of the following three ways:

- **Scan Primary Folders Only** - Scans folders most commonly used for storing media, such as My Documents, My Pictures and Desktop.
- **Scan All Folders** - Scans your entire computer for media (except Windows and Program Files folders).
- **Select the folders you want to scan** -Let's you choose the folders for scanning.

- **View**

Full Screen/Play (F4)

Plays or displays the first selected file in full screen view.



- Main Buttons

* Get Photos

Acquire from Scanner

Here you can:

- Acquire images from connected TWAIN compliant devices such as scanners and some digital cameras.
- Assign names to image files as they are acquired (using today's date or a descriptive word).

How to acquire images from a TWAIN compliant device:

1. Select a scanner or other TWAIN device from the drop down list.
2. Choose the file format you want to use for the acquired images (JPG, BMP, TIF, PCX, TGA).
3. If you've selected JPG as the file format, select the image quality for the acquired images (Highest, High, Normal, Low). The lower the quality selected, the higher the level of compression applied.
4. Choose a destination folder for the photos by clicking "Browse" (folder icon) and

- 5. navigating to the folder.
- 5. Choose a naming method (today's date or description). Enter a description if applicable.
- 6. Click "Acquire".

* **Edit**

Photo Editing Tools

The Photo Editing Tools module includes a complete set photo enhancement, editing and retouching controls.

The window can be stretched to provide a large size view of the active photo. Double click the module's tool bar to maximize the window to fill the computer screen.

In addition to the large photo workspace, the Photo Editing Tools module includes five distinct sets of controls:

Enhance

The Enhance function includes two types of controls:



Auto Enhance

Click "Auto Enhance" button to improve the overall quality of your pictures with a single click.

Manual Fix

For precise image enhancement control, adjust the Brightness, Contrast and Sharpen sliders.

How to enhance a photo manually:

1. Move the sliders to adjust the level of Brightness and Contrast and to make the image more Sharp.

2. Use the zoom slider to get a closer look at how the adjustment affects the photo.

3. Click "Apply" if you like the result. Click "Cancel" if you do not.

Color

This feature is designed to fix digital photos that have unnatural color or appear to dark. It's also great for fixing scanned versions of old prints that have faded or whose colors have changed after many years of neglect.

How to fix the color of a photo:

1. Drag the color balance sliders to make the photo color appear more natural. Add red or yellow to make the photo warmer. Add blue or green to make the photo cooler.
2. Drag the Lighter/Darker slider to the left to reveal details hidden in a dark photo or to the right to make a faded photo look new again.
3. Click "Apply" if you like the result. Click "Cancel" if you do not.

Red-Eye

This feature makes it easy for you to fix all red eye - a common problem in flash photography.

There are two ways to fix redeye:



Auto Fix

1. Simply click the "Fix Red-Eye" button to automatically find and fix all red-eye.
2. If not all of the redeye is fixed, used the "Click to Fix" method.

Manual Fix

1. Use the zoom slider on the toolbar to zoom in on the photo.
2. Drag the small white box inside the zoom navigator to move over a red eye.
3. Place your cursor directly over the red eye and click.
4. Repeat the process until all red eyes are fixed.
5. Click "Undo" if you make a mistake or don't like the result.

Crop

This feature enables you to trim photos for dramatic effect or cut off the ugly/distracting parts of a picture.

How to use crop:

1. Choose the crop orientation (portrait or landscape).
2. Select a fixed proportion for the crop rectangle (4:6, 5:7, 8:10) or choose "Custom" if you want to use another proportion.
3. Resize the crop rectangle by clicking and dragging the red lines.
4. Move the crop rectangle into position by clicking and dragging inside the red box.
5. Click "Crop". The area inside the rectangle will be kept, the area outside will be trimmed away.
6. Click "Undo" if you make a mistake or don't like the result.

Straighten

This feature enables you to fix photos that appear to be tilted.

How to use Straighten:

1. Move the slider (or click the rotate buttons) until the photo appears straight.
2. Use the superimposed grid lines for vertical and horizontal reference.
3. Click "Apply" if you like the result. Click "Cancel" if you do not.

Blur Background

This feature can be used in a subtle way -- to tone down un-important background details, or for dramatic effect -- by making the main subject of a photo pop out of the picture.

How to use Blur Background:

1. With your cursor, trace a line around the person or object you want to stand out. When you release the mouse button, the area outside the traced line will become slightly blurred.
2. Drag the first slider to make the transition between the blurred and non-blurred area sharp or smooth.
3. Drag the second slider to increase or decrease the amount of blur.
4. Click "Apply" if you like the result. Click "Cancel" if you do not.

Saving Your Results

When you're done editing a photo, click Save As to save your results. You can choose to overwrite the original file or save a new one.

Click "Close" to exit the Photo Editing module.

Retouch



Healing Brush

The Healing Brush is good for fixing dust, scratches and removing skin blemishes.

How to use the Healing Brush to fix a skin blemish:

1. Establish a source point for the Healing Brush by holding the Shift key and clicking on

- an area of the skin that is close in color and texture to the area you want to heal.
2. Use the zoom control to zoom in on the blemish.
3. Adjust the size of the healing brush so the cursor (circle) is only slightly larger than the blemish.
4. Paint over the blemish. The area will be healed.

Click "Undo" if you make a mistake or don't like the result.

Clone

The Clone tool is good for removing unwanted elements from a photo. It can also be used for fun effect, like moving a nose from one person to another.

How to use the Clone tool to remove a telephone pole from the background of a photo:

1. Establish a source point for the Clone tool by holding the Shift key and clicking on an area of the sky that you want to use to paint over the telephone pole.
2. Adjust the brush size so the cursor (circle) is only slightly larger than the widest part of the telephone pole.
3. Click and hold your mouse button and carefully paint over the telephone pole. Do not release the mouse button until the job is done. The sky will be cloned into place.

Click "Undo" if you make a mistake or don't like the result.

Lighten/Darken

The Lighten/Darken tool is good for adjusting specific areas of a photo.

Smudge

Simulate the smearing of wet paint. Please click and drag the sliders below to change the brush size and hardness.

Sharpen

Sharpen blurry areas. Please click and drag the sliders below to change the brush size and transparency.



Blur

Smooth out rough areas. Please click and drag the sliders below to change the brush size and intensity.



Paint Brush

Let you "paint" on your image when you click and drag the mouse. Please click and drag the sliders below to change the brush size and transparency.



Line

Draw a straight line in the photo. Please click and drag the sliders below to change the line width and transparency.



Eraser

Simulate an eraser, removing the image painting by paintbrush and line tools from your photo. Please click and drag the sliders below to change the eraser size and effect.

Saving You Results

When you're done, click "Save As" button to save your results. You can overwrite the original file or save it as a new one. Or click "Cancel" to exit without saving.

Click "Close" to exit the Photo Editing Module.

Note: For more detailed information, please refer to the [Help] of the program.

10.Specification

Interface:	USB 1.1 & USB 2.0
Image Sensor:	5 mega pixels CMOS sensor
Lens:	F no.= 6.0, 3 glass elements , Half-field Angle=15°
Panel	2.4" TFT LCD
Focus Range:	Fixed focus
Exposure Control:	Automatic / Manual (-2.0 EV~ +2.0EV)
Color Balance:	Automatic
Scan high resolution	2592X1680
Data Conversion	10 bits per color channel
Film type	Standard 35mm Film , Monochrome , Slide
Scan Method	Single pass
Light Source	Back light (3 white LED)
Button	Left, Right ,Start
TV OUT	YES (NTSC / PAL)
Storage	Built-in 32 MB Nand Flash + SD card Slot (supports up to 16GB SDHC)
Power:	DC 5V (Adapter included)
USB MODE	Mass storage
Dimensions	3.8" (H) X 3.7"(W) X 6.7"(L)
Weight	1.1 lbs
Software	Arcsoft PhotoImpression 6 (included) for Windows XP , Vista (32/64-bit) <i>- Pentium III 450 processor or equivalent (Pentium III 800 recommended)</i> <i>- 128 MB of RAM (Minimum), 50 MB available hard disk space (minimum), 800x600</i>

	<i>pixels 16-bit color monitor</i> <i>- Microsoft Windows Media Player 9.0 or higher</i> <i>- Microsoft DirectX 9.0 or higher (included on installer)</i>
Operating Systems	Windows 98SE (Driver needed), Windows ME, Windows 2000, Windows XP, Windows Vista (32/64-bit), Mac OS 10.4 or above