

Copy and Scan on the Pharos Multifunction Printers

Pharos multifunction printers (MFPs) on campus provide scanning and copying.

Cost and Accounts

- Copying and printing require a printing quota and an active MC domain account, for full information please see the Printing on Campus with Pharos handout or search our website.
- Scanning is free and does not require an account, with scanned files being sent from the printer as an attachment to an email address of your choosing.

Locations

- Please see our [Pharos Printer Locations](#) web page for current information on available MFPs.

Copying on a Pharos multifunction printer

1. Place your original material in either the feed tray on top of the printer, face up with the first page on the top, or lift the top lid and place face down against the glass, aligned to the rear left corner.
 2. Swipe your ID card or tap the **Pharos** icon in the touch screen on the printer's control panel, then **OK**.
 3. If prompted type in your MC login and press **OK**, then your password (same as your CUIMC email) and **OK**.
- To troubleshoot a Pharos login/MC account problem you can visit <https://mypassword.cumc.columbia.edu>, or contact us 7 days a week at 212-305-4357 option 5.



4. Your Account Information will appear, press **OK** to continue.
5. Select the **Copy** key at the upper left, next to the display panel.
6. In the display panel select any desired finishing options such as:
 - Auto Reduce/Enlarge - the copier will detect the size of your original and re-size to the default paper size
 - Duplex copying - 1 sided -> 2 sided copies two 1-sided pages to one 2-sided page, while 2-sided -> 2-sided copies one 2-sided page on one 2-sided page
7. Use the number keys to the right of the display to enter your desired number of copies.
8. Select the **Start** key at the bottom right to begin copying.
9. When done press the **#** key (also labeled Enter, above the Start button).
10. Press the Home key in the upper left, and the Pharos icon in the display to verify you are logged out. Don't forget to remove your original materials.

See page 2 of this handout for Scanning instructions

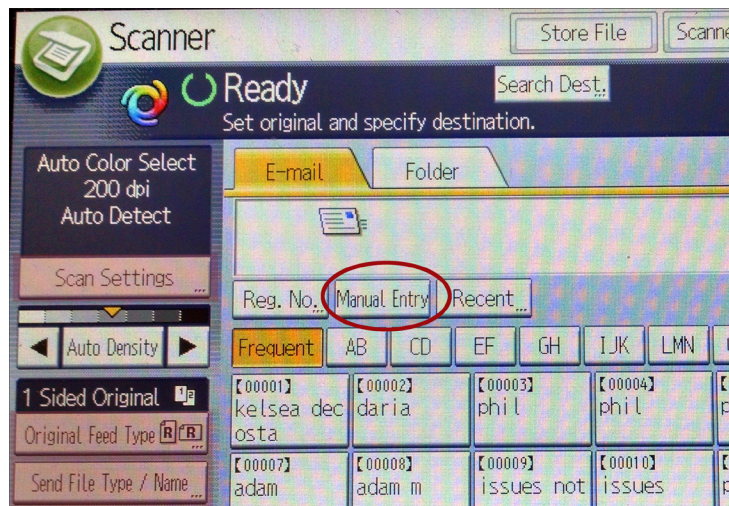
Scanning on a Pharos multifunction printer

1. Place your original material on the printer (see the first step of Copying instructions on page 1 for more help).
2. Press the **Scanner** key in the lower left of the printer's control panel.
3. The touch display will show a Scanner menu. If desired select options in the left column for:

- **Scan Settings:** to choose resolution, scan size, and original type (text, photo, etc.).
- **Original sides or feed type** - for orientation and scan sides of originals.
- **Send File Type/Name** - to select Single (separate file for each scan) or Multi-page (combine all scans to one file), file types such as TIFF/JPEG (common image formats; note that JPEG is only available with Single page) or PDF, and type in a desired file name.

Please see the Ricoh online manual for more help with Scanner options:

http://support.ricoh.com/bb_v1oi/pub_e/oi_view/0001044/0001044959/view/scanner/int/index_chap_04.htm



4. When ready to scan, select the **Manual entry** button.
5. Type in the email address and press **OK**.
6. Select the **Start** key at the bottom right to begin scanning.
7. When done press the **#** key (also labeled Enter, above the Start button).
8. Press the **Home** key in the upper left, and the Pharos icon in the display to verify you are logged out. Don't forget to remove your original materials.

Basic Image Editing

For online tutorials and more detailed help please see the Scanning section of <https://scantips.com>.

Resolution and File Size

Image resolution is represented in Pixels Per Inch (PPI). Pixels are units of data that display a single color, similar to the way that printed dots make up a newspaper picture. A higher number PPI will include more detail, but will create a larger sized file. Typical settings are:

- Computer monitor (email, web site, etc.) - 72 PPI for small file size/low quality, 300 for better quality
- Printer - 100 to 300 PPI based on desired quality. Professionally printed images may require a higher PPI, check with the print company for recommended resolution settings.

NOTE: Dots Per Inch (DPI) is used interchangeably with PPI, though DPI refers to printed images.

File Types

GIF - Graphic Image File format. Best for logos and simple images that will be viewed online. GIFs tend to be for faster downloading and display on web pages.

JPG/JPEG - Joint Photographic Experts Group, best used for photographs and complex images. Use JPG for true color graphics; some detail is lost in the compression. Popular format for print and screen.

TIFF - Tagged Image File Format. Designed for all types of computers and programs.

BMP - Windows Bit-Mapped format. Optimized for Microsoft programs such as Word.

Adjusting Image Sizes with Adobe Photoshop

Cropping an Image:

1. Click on the Crop button in the Tools palette to the upper left:
2. Select the desired part of the photo and use your mouse to adjust the selection box around the image.
3. To crop, press your Return key or select **Image** → **Crop** from the top menu bar.



Resizing an Image:

1. To resize, select **Image** → **Image Size** from the top menu bar.
2. In the dialog box, make sure that **Constrain Proportions** is selected so that the width and height of the image change proportionately.
3. Either enter the desired values in pixels or print size. Click **OK**.