

MICROTEK

MiDICOM
Reference Manual



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To obtain optimal results from the Microtek scanning software and user's manual, you should be familiar with such Windows concepts as pointing, clicking, dragging, and selecting from menus and dialog boxes. If these things are new to you, refer to your Microsoft Windows User's Guide.

I49-004496 A

January 2010

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Introduction

MiDICOM is one product of Microtek's medical image management system. It is a DICOM converter providing an easy and essential means for getting non-DICOM equipment and DICOM viewers to communicate with each other in a meaningful way. With the help from MiDICOM, you can take any files in a non-DICOM format and from there send them onto a DICOM PACS server, picture archiving and communications system, where they can be read, checked, saved, or printed as DICOM files.

- Allows directly querying and retrieving data directly from a worklist server.
- Allows building up patient information manually.
- Converts various file formats easily into DICOM format.
- Uploads data to PACS/RIS server immediately after done.
- Friendly and easy-to-use software interface.

System Requirements

- Windows XP and Windows 7 (32-bit)
- Intel-Pentium 4 1.5GHz (recommended)
- 512 RAM or above
- Enough hard disk space for applications installation and data saving
- CD-ROM or DVD-ROM drive (for software installation)
- “Thousands of colors” display or better
- Microtek digitizers that support MiDICOM

Setting up Functions before Using the MiDICOM Software

After installing the MiDICOM software, there is a shortcut icon appearing on the desktop of your computer. Double clicking the icon, you will enter a setup interface of MiDICOM. You can set up some basic function relating to the use of MiDICOM software.

The Setup for PACS Server

The screenshot shows the 'MiPAX DICOM' configuration window. On the left is a sidebar with four buttons: 'PACS Server' (selected), 'Worklist Server', 'Quality Setup', and 'Name Pattern'. The main area is titled 'Pacs Server' and contains four input fields: 'Local AE' with the value 'DICOM01', 'Server AE' with 'EZServer', 'Server IP' with '172.16.10.11', and 'Server Port' with '108'. Each field has a green label on the left. Below these fields is a 'Network testing' button. At the bottom right are 'Save' and 'Close' buttons with disk icons.

Local AE: Used to name the local workstation.

Server AE: Used to name the PACS database.

Server IP: Set up the IP address for the PACS server.

Server Port: Set up the IP port for the PACS server.

Network testing: Press to check whether the internet connection is successful.

Save button: Press to save the setting.

Close button: Press to leave from the PACS Server interface.

The Setup for Worklist Server

MiPAX DICOM

Config

PACS Server

Worklist Server

Quality Setup

Name Pattern

Worklist Server

Local AE DICOM01

Server AE WLS

Server IP 172.16.10.11

Server Port 106

Network testing

Save **Close**

Local AE: Used to name the local workstation.

Server AE: Used to name the Worklist database.

Server IP: Set up the IP address for the Worklist server.

Server Port: Set up the IP port for the Worklist server.

Network testing: Press to check whether the internet connection is successful.

Save button: Press to save the setting.

Close button: Press to leave from the PACS Server interface.

Quality Setup

DICOM Quality: Allow you to set up the dpi value for when converting non-DICOM files into files in DICOM format. The selectable value is 100, 150, 200 or 300 dpi. The default is 200 dpi.

Grayscale: Allow you to change converted file into a grayscale mode.

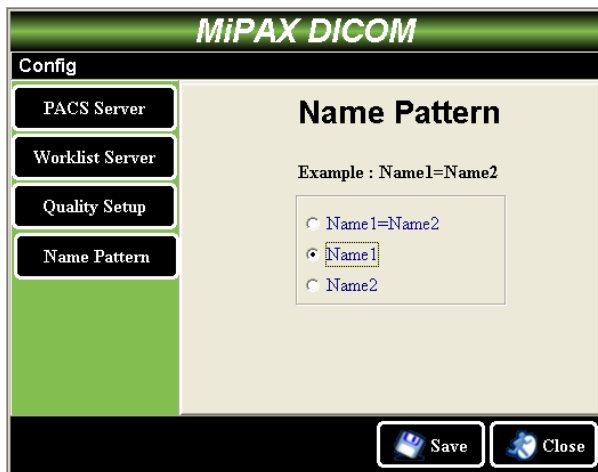
Same time to printer: If this option is checked, when selected non-DICOM files are converted into files in DICOM format, the system will also print out these files in paper from a connected printer. Select an available printer from the scroll-down menu.

Save button: Press to save the setting.

Close button: Press to leave from the PACS Server interface.

The Setup for Worklist Server

This setup interface allows you to choose the displaying pattern of patients' names in the lists from the Worklist server.



Choose "Name 1=Name 2" to display both given name and middle name of a patient.

Choose "Name 1" to display the given name only of a patient.

Choose "Name 2" to display the middle name only of a patient.

Please take note that this setup options only works when in a situation a patient has a given name and a middle name. If not, please always select "Name 1=Name 2" in order to avoid errors when retrieving data from the Worklist server.

Using the MiDICOM Software

MiDICOM provides you a reliable converting solution. By applying with MiDICOM, various e-files formats, such as Microsoft Word, Excel, Powerpoint, Adobe PDF, TIFF, and JPEG, can be transformed into DICOM format in seconds. All you

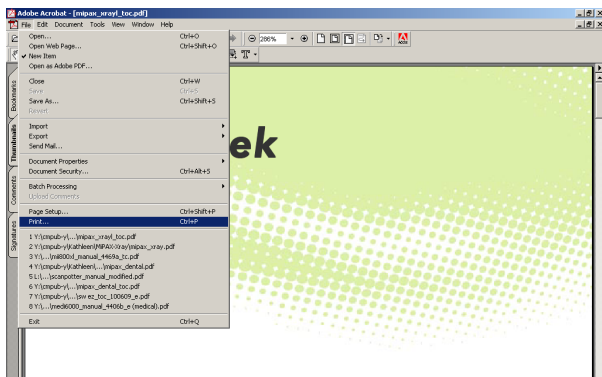
How to Activate the MiDICOM Software

1. Open the file which you want to convert into a file in DICOM format with an appropriate application.

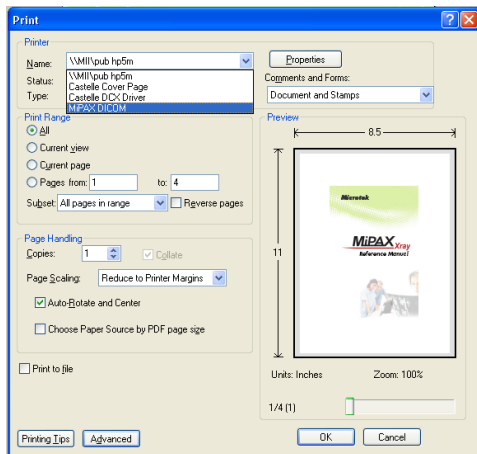
For a demonstrating purpose, this reference use a file in PDF format as an example.

2. When the PDF file is activated, select File and then Print.

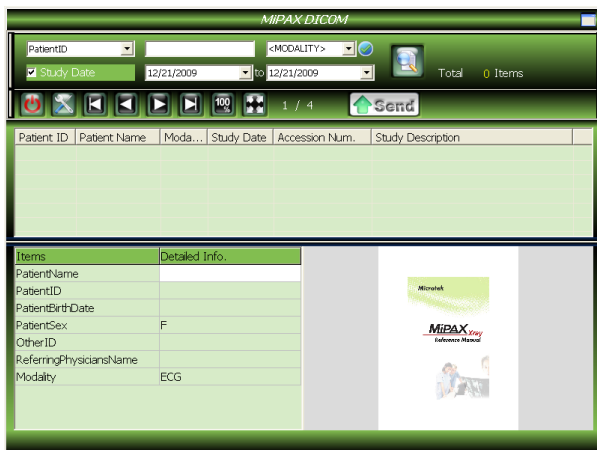
The Print option menu displays on the screen immediately.



3. In the Print option menu, select "MiPAX MiDICOM" in the Name column as your desired printer. Then, click the OK button to start converting.

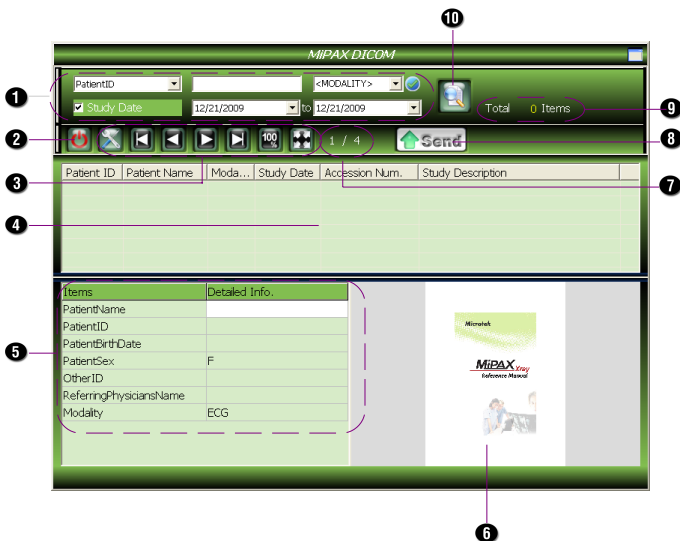


After few seconds, the main Interface of the MiDICOM software will appear on the screen. You may start to use features then.



Knowing the Main Interface of MiDICOM

This section shows you a general picture about how each feature or command works on the main interface of MiDICOM.



1. Search conditions: Used to search patients in the list of the Worklist server. You can use either Patient ID, Accession Number, Modality or Study Date to start a search.
2. Exit button: Press to exit the MiDICOM.

3. Adjustment tools: Used to check the converted files in details.



Tool: Press to enable the setup interfaces of the MiDICOM. It is another way to extend the setup interfaces besides clicking the shortcut icon on the desktop.



First page: Press to go to the first page of the converted file.



Previous page: Press to go to the previous page of the converted file.



Next page: Press to go to the next page of the converted file.



Last page: Press to go to the final page of the converted file.



100%: Press to enlarge the converted file to the actual size.



Fit: Press to modify the size of the converted file to fit the size of the preview area.

4. Displaying area of the data from the Worklist server: Display the data of patients retrieved from the Worklist server.
5. Key-in columns for a patient: Used to key in information for a patient and then send it with the converted files to the PACS server.
6. Preview area: Display the preliminary image of converted files.
7. Numbers of pages: Display the numbers of pages which have been converted.

8. Send button: Press to send converted files upto the PACS server.
9. Numbers of items: Display the numbers of items which have been found in the Worklist server according to the selectable conditions.
10. Search button: Press to start a search in the Worklist server.

Building up a Patient's Data

After the files are converted, you can build up the patient's data corresponding with the converted files, and then after done, send both of them upto the PACS server for the further use.

1. Follow the steps in the previous section "How to Activate the Main Interface of the MiDICOM Software" to enable the MiDICOM software.
2. Use the key-in columns at the left bottom of the interface to enter the detail information for a patient.
 - A. Patient Name: Used to enter a patient's full name.
 - B. Patient ID: Used to assign an unique identification number for a patient.
 - C. Patient Birth Date: Used to enter the date of birth of a patient. You can directly enter the year, month and day in the column; Or, you can use the scroll-bar menu to choose the date of birth from a built-in calender.
 - D. Patient Sex: Used to select the gender of a patient.
 - E. Other ID: Used to enter another identification number for a patient if applicable.
 - F. Referring Physician's Name: Used to enter a physician's name.
 - G. Modality: Used to select the device used to make an examination.

Retrieving the Data of Patients from the Worklist Server

Besides, MiDICOM software allows you to download the data of patients directly from the worklist server and work them with the converted files. You can also send both of them up to the PACS server for the further use after done.

1. Follow the steps in the previous section "How to Activate the Main Interface of the MiDICOM Software" to enable the MiDICOM software.
2. Use the search conditions at the top of the interface to generate a search for patients in the worklist server.
 - A. Patient ID/Accession Number: Used to enter a patient's unique identification number or an assigned accession number to start a search in the worklist server.
 - B. Modality: Used to select a medical device in use as a search condition. By pressing the check button beside, you can set up the selected modality as the default modality for the further use.
 - C. Study Date: Used to assign a time range for starting a search. The default value is set as the date of today. Use the scroll-down menu to change the range of the study date. Uncheck the Study Date option to cancel using it as a search condition.
3. After done, press the Search button.

The system start a search immediately and then display the result machine with the search conditions in the displaying area of the data from the Worklist server.

- Move the cursor (mouse) and point to the data you want to select, and then double click it.

The selected data will appear in the area where you can enter the patient's data.

- If necessary, use the adjustment tools to check the preview image of the converted files in the preview area.
- After done, press the Send button to upload the patient's data and the converted files to the PACS server.

