

Sante Dicommander Manual

Copyright © 2009 [Santesoft](http://Santesoft.com), all rights reserved

Sante Dicommander is a command-line anonymizer and converter for DICOM 3 and NEMA 2 files. It is compatible with all modalities (CT, MR, NM, US, XA, MG, CR etc.), all manufacturers and all DICOM 3.0 and NEMA 2 file types.

Sante Dicommander is Windows Vista compatible.

Features

- It can anonymize files and remove "burned-in" annotations
- It can modify the header of DICOM files (insert/remove/modify header's tags)
- It can create compressed DICOM files from uncompressed DICOM files
- It can create uncompressed DICOM files from compressed DICOM files
- It can create DICOM 3 part 10 files from NEMA 2 files
- It can create NEMA 2 files from DICOM 3 part 10 files
- It can split multi-frame DICOM files to single-frame DICOM files
- It can create simple image files (jpeg, tiff, png, bmp), annotated or not, from DICOM files
- It can work with single files or with folders (batch mode)
- Low total cost of ownership: Free updates and free technical support via e-mail, for product's lifetime
- It is Windows Vista compatible
- There is a full featured, time unlimited demo version for evaluation

Warning

This computer program is protected by copyright law and international treaties. Unauthorized reproduction, distribution, or bundling with other software packages of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law.

Minimum Requirements

- Intel Core Duo 1.6GHz, Pentium 4 2GHz or AMD Athlon 2000+ (or better)
- 512 MB memory or more
- Windows Vista/XP (SP2/SP3)
- 5MB free space on hard disk

List of switches

-h:	Displays the help text in the command line window
-H:	Displays the help text in a dialog box
-k:	Allows the user to insert the registration key
-r:	Displays the registration information in the command line window
-R:	Displays the registration information in a dialog box
-c:	Displays the version and the copyright information in the command line window
-C:	Displays the version and the copyright information in a dialog box
-f:	Allows the user to specify the working folder (the sub-folders are used) or file. If the folder (or file) name contains spaces the name must be enclosed in quotes, e.g. dicommander - F "C:\Temp Folder"
-F:	Allows the user to specify the working folder (the sub-folders are ignored). If the folder (or file) name contains spaces the name must be enclosed in quotes, e.g. dicommander - F "C:\Temp Folder"
-d:	Creates a DICOMDIR and saves it in the selected folder
-D:	Creates a DICOMDIR and saves it in the parent folder
-i:	Converts DICOM files to simple image format (jpeg,jpeg2000,bmp,tiff,png) and burns in image header's information
-I:	Converts DICOM files to simple image format (jpeg,jpeg2000,bmp,tiff,png)
-a:	Creates an anonymized DICOM file for every DICOM file and saves it with a different name (the program adds a suffix in the file's name)
-A:	Creates an anonymized DICOM file for every DICOM file and saves it with the same name (the program replaces the original file)
-m:	Creates a modified DICOM file for every DICOM file and saves it with a different name (the program adds a suffix in the file's name)
-M:	Creates a modified DICOM file for every DICOM file and saves it with the same name (the program replaces the original file)
-n:	Creates a NEMA2 file for every DICOM 3 Part 10 file and saves it with a different name (the program adds a suffix in the file's name)
-N:	Creates a NEMA2 file for every DICOM 3 Part 10 file and saves it with the same name (the program replaces the original file)
-p:	Creates a DICOM 3 Part 10 file for every NEMA2 file and saves it with a different name (the program adds a suffix in the file's name)
-P:	Creates a DICOM 3 Part 10 file for every NEMA2 file and saves it with the same name (the program replaces the original file)
-s:	Splits multi-frame DICOM files to many single-frame DICOM files
-u:	Creates an uncompressed DICOM file for every compressed file and saves it with a different name (the program adds a suffix in the file's name)
-U:	Creates an uncompressed DICOM file for every compressed file and saves it with the same

	name (the program replaces the original file)
-x:	Creates a (jpeg lossless) compressed DICOM file for every uncompressed file and saves it with a different name (the program adds a suffix in the file's name)
-X:	Creates a (jpeg lossless) compressed DICOM file for every uncompressed file and saves it with the same name (the program replaces the original file)
-z:	Creates a (jpeg) compressed DICOM file for every uncompressed file and saves it with a different name (the program adds a suffix in the file's name)
-Z:	Creates a (jpeg) compressed DICOM file for every uncompressed file and saves it with the same name (the program replaces the original file)

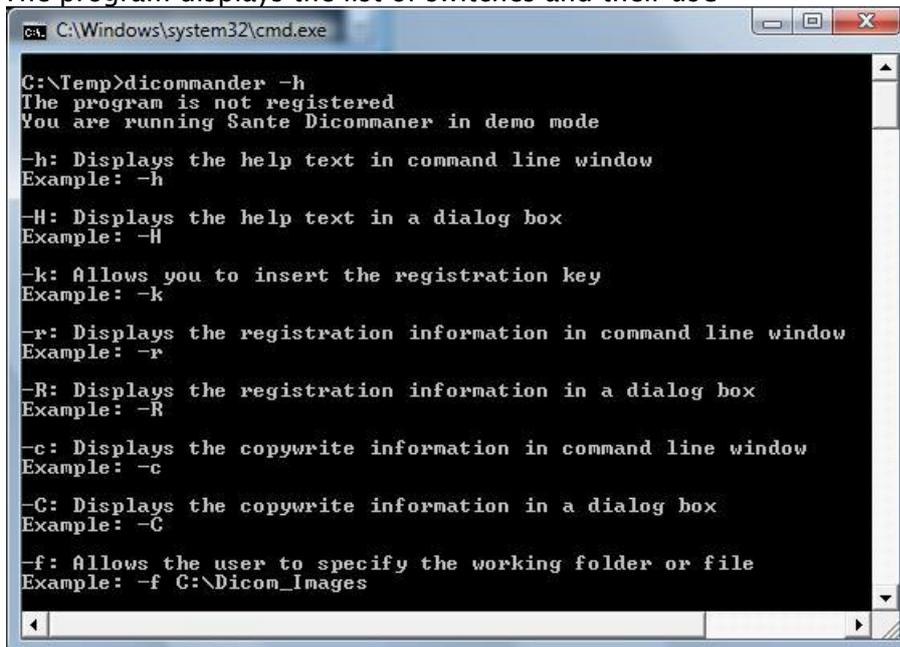
Instructions of use

- 1) [Get Help](#) »»
- 2) [Insert the license key](#) »»
- 3) [Display the registration information](#) »»
- 4) [Display the program's version and the copyright information](#) »»
- 5) [Create a DICOMDIR](#) »»
- 6) [Create simple images \(jpeg,jpeg2000,bmp,tiff,png\) from DICOM files](#) »»
- 7) [Split multi-frame DICOM files to many single-frame DICOM files](#) »»
- 8) [Convert DICOM 3 Part 10 files to NEMA2](#) »»
- 9) [Convert NEMA2 files to DICOM 3 Part 10](#) »»
- 10) [Convert compressed DICOM files to uncompressed](#) »»
- 11) [Convert uncompressed DICOM files to compressed](#) »»
- 12) [Anonymize DICOM files](#) »»
- 13) [Modify DICOM files \(insert/remove/modify header's tags\)](#) »»

1) Get help

- from command line run: `dicommander -h`

The program displays the list of switches and their use



```
C:\Temp>dicommander -h
The program is not registered
You are running Sante Dicommaner in demo mode

-h: Displays the help text in command line window
Example: -h

-H: Displays the help text in a dialog box
Example: -H

-k: Allows you to insert the registration key
Example: -k

-r: Displays the registration information in command line window
Example: -r

-R: Displays the registration information in a dialog box
Example: -R

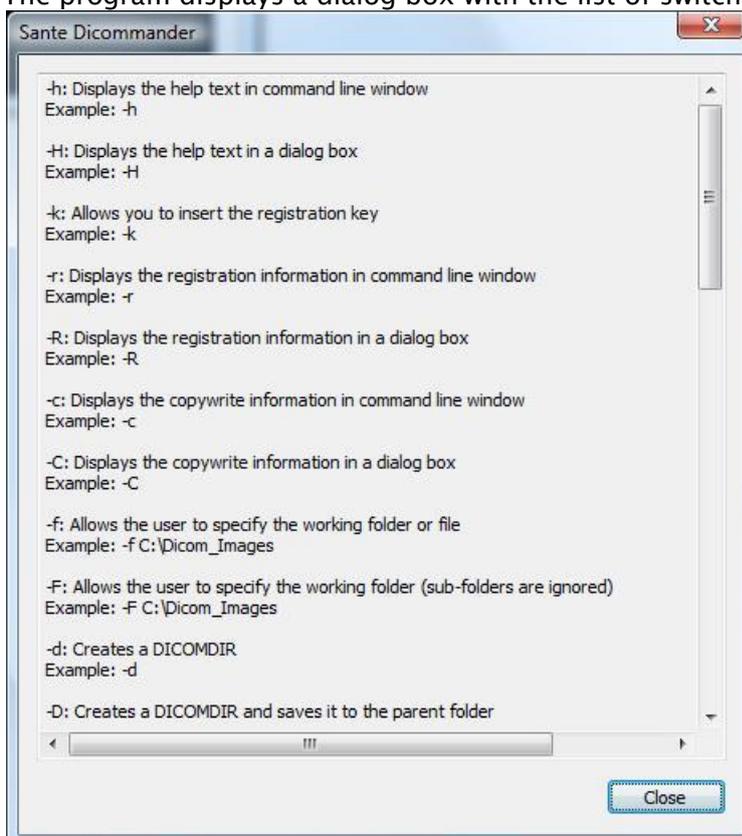
-c: Displays the copywrite information in command line window
Example: -c

-C: Displays the copywrite information in a dialog box
Example: -C

-f: Allows the user to specify the working folder or file
Example: -f C:\Dicom_Images
```

- from command line run: `dicommander -H`

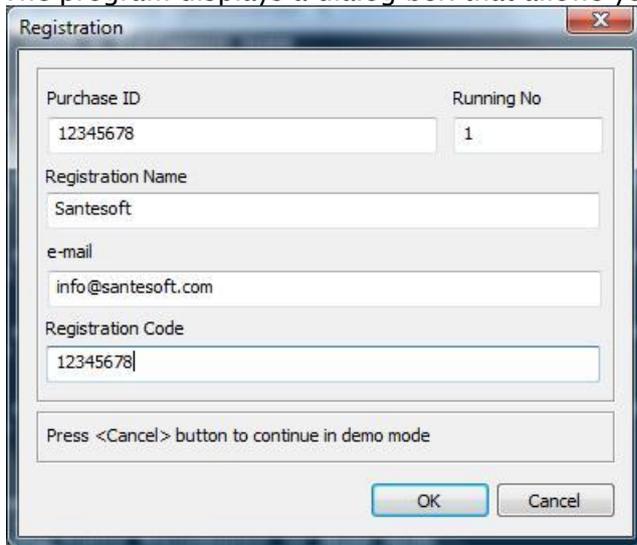
The program displays a dialog box with the list of switches and their use



2) Insert the license key

- from command line run: `dicommander -k`

The program displays a dialog box that allows you to insert the key



A screenshot of a Windows-style dialog box titled "Registration". The dialog box contains several input fields and a message. The fields are: "Purchase ID" with the value "12345678", "Running No" with the value "1", "Registration Name" with the value "Santesoft", "e-mail" with the value "info@santesoft.com", and "Registration Code" with the value "12345678". At the bottom, there is a message: "Press <Cancel> button to continue in demo mode". Below the message are two buttons: "OK" and "Cancel".

Purchase ID	Running No
12345678	1

Registration Name
Santesoft

e-mail
info@santesoft.com

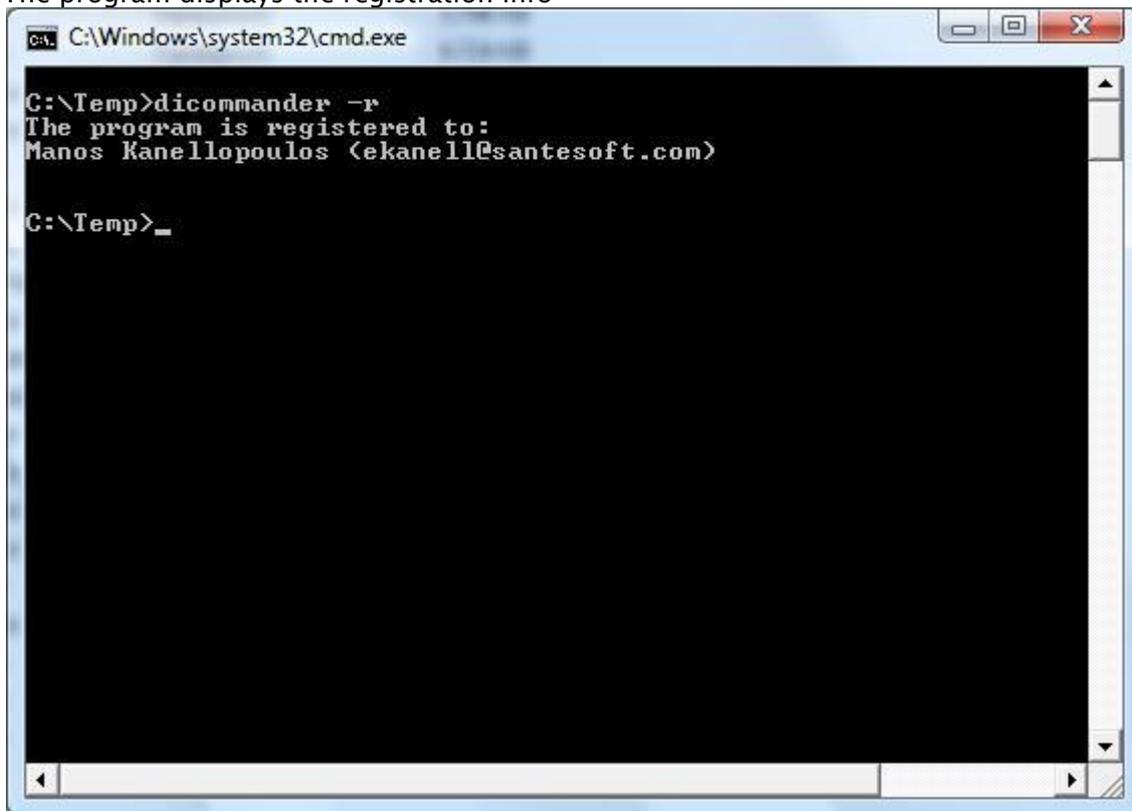
Registration Code
12345678

Press <Cancel> button to continue in demo mode

OK Cancel

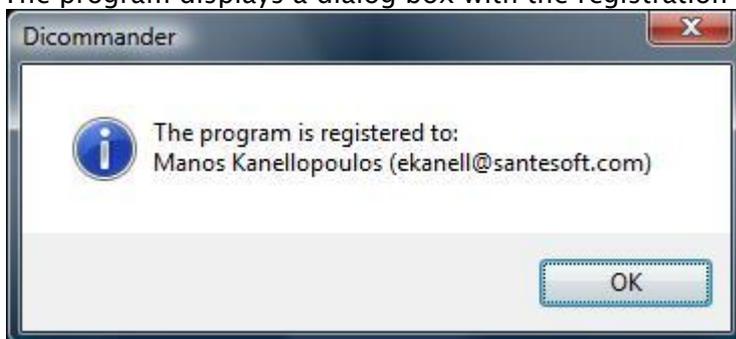
3) Display the registration info

- from command line run: `dicommander -r`
The program displays the registration info



```
C:\Windows\system32\cmd.exe
C:\Temp>dicommander -r
The program is registered to:
Manos Kanellopoulos <ekanell@santesoft.com>
C:\Temp>_
```

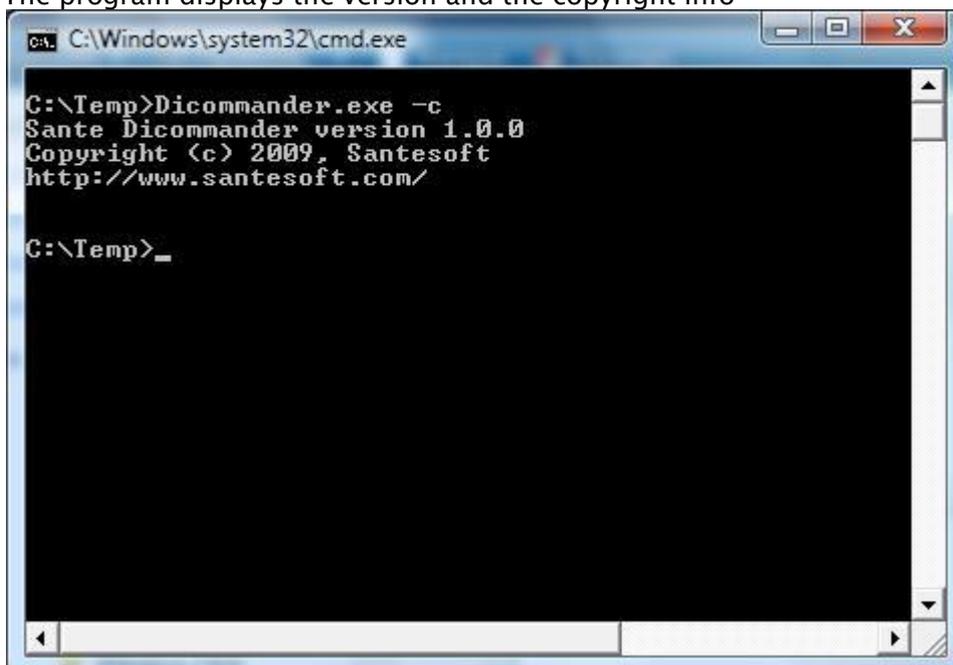
- from command line run: `dicommander -R`
The program displays a dialog box with the registration info



4) Display the program's version and the copyright information

- from command line run: *dicommander -c*

The program displays the version and the copyright info



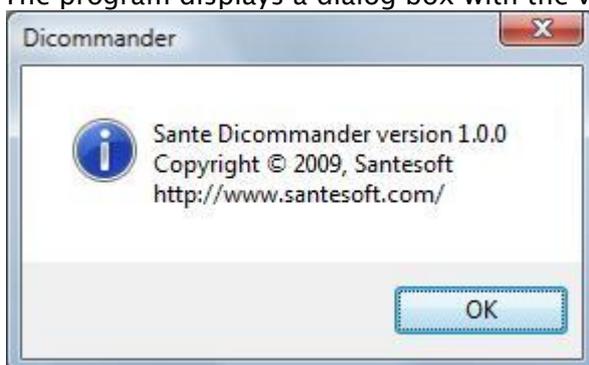
```
C:\Windows\system32\cmd.exe

C:\Temp>Dicommander.exe -c
Sante Dicommander version 1.0.0
Copyright (c) 2009, Santesoft
http://www.santesoft.com/

C:\Temp>_
```

- from command line run: *dicommander -C*

The program displays a dialog box with the version and the copyright info



5) Create a DICOMDIR

- from command line run: *dicommander -d -f [selected folder]*
e.g. `dicommander -d -f C:\Dicom_Files\Series_1`
The program creates a DICOMDIR from files within the C:\Dicom_Files\Series_1 folder and its sub-folders and saves it in the folder C:\Dicom_Files\Series_1.
(If the folder name contains spaces use quotes: `dicommander -d -f "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -D -f [selected folder]*
e.g. `dicommander -D -f C:\Dicom_Files\Series_1`
The program creates a DICOMDIR from files within the C:\Dicom_Files\Series_1 folder and its sub-folders and saves it in the folder C:\Dicom_Files.
(If the folder name contains spaces use quotes: `dicommander -D -f "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -d -F [selected folder]*
e.g. `dicommander -d -F C:\Dicom_Files\Series_1`
The program creates a DICOMDIR from files within the C:\Dicom_Files\Series_1 folder (its sub-folders are ignored) and saves it in the folder C:\Dicom_Files\Series_1.
(If the folder name contains spaces use quotes: `dicommander -d -F "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -D -F [selected folder]*
e.g. `dicommander -D -F C:\Dicom_Files\Series_1`
The program creates a DICOMDIR from files within the C:\Dicom_Files\Series_1 folder (its sub-folders are ignored) and saves it in the folder C:\Dicom_Files.
(If the folder name contains spaces use quotes: `dicommander -D -F "C:\Dicom Files\Series 1"`)

6) Create simple images (jpeg, jpeg2000, bmp, tiff, png) from DICOM files

- from command line run: *dicommander -i [file type] -f [selected folder]*
e.g. `dicommander -i jpeg -f C:\Dicom_Files\Series_1`
The program creates jpeg files from DICOM files within the C:\Dicom_Files\Series_1 folder and its sub-folders.
The program burns in jpeg images some DICOM header's tags (e.g. patient's name and ID)
Other file types examples:
`dicommander -i jpeg2000 -f C:\Dicom_Files\Series_1`
`dicommander -i bmp -f C:\Dicom_Files\Series_1`
`dicommander -i tiff -f C:\Dicom_Files\Series_1`
`dicommander -i png -f C:\Dicom_Files\Series_1`
(If the folder name contains spaces use quotes: `dicommander -i jpeg -f "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -l [file type] -f [selected folder]*
e.g. `dicommander -l jpeg -f C:\Dicom_Files\Series_1`
The program creates jpeg files from DICOM files within the C:\Dicom_Files\Series_1 folder and its sub-folders.
Other file types examples:
`dicommander -l jpeg2000 -f C:\Dicom_Files\Series_1`
`dicommander -l bmp -f C:\Dicom_Files\Series_1`
`dicommander -l tiff -f C:\Dicom_Files\Series_1`
`dicommander -l png -f C:\Dicom_Files\Series_1`
(If the folder name contains spaces use quotes: `dicommander -l jpeg -f "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -i [file type] -F [selected folder]*
e.g. `dicommander -i jpeg -F C:\Dicom_Files\Series_1`
The program creates jpeg files from DICOM files within the C:\Dicom_Files\Series_1 folder (its sub-folders are ignored).
The program burns in jpeg images some DICOM header's tags (e.g. patient's name and ID)
Other file types examples:
`dicommander -i jpeg2000 -F C:\Dicom_Files\Series_1`
`dicommander -i bmp -F C:\Dicom_Files\Series_1`
`dicommander -i tiff -F C:\Dicom_Files\Series_1`
`dicommander -i png -F C:\Dicom_Files\Series_1`
(If the folder name contains spaces use quotes: `dicommander -i jpeg -F "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -l [file type] -F [selected folder]*
e.g. `dicommander -l jpeg -F C:\Dicom_Files\Series_1`
The program creates jpeg files from DICOM files within the C:\Dicom_Files\Series_1 folder (its sub-folders are ignored).
Other file types examples:
`dicommander -l jpeg2000 -F C:\Dicom_Files\Series_1`
`dicommander -l bmp -F C:\Dicom_Files\Series_1`
`dicommander -l tiff -F C:\Dicom_Files\Series_1`
`dicommander -l png -F C:\Dicom_Files\Series_1`
(If the folder name contains spaces use quotes: `dicommander -l jpeg -F "C:\Dicom Files\Series 1"`)

7) Split multi-frame DICOM files to many single-frame DICOM files

- from command line run: *dicommander -s -f [selected folder]*
e.g. `dicommander -s -f C:\Dicom_Files\Series_1`
The program creates one DICOM file for every frame of every multi-frame DICOM file within the C:\Dicom_Files\Series_1 folder and its sub-folders.
(If the folder name contains spaces use quotes: `dicommander -s -f "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -s -F [selected folder]*
e.g. `dicommander -s -F C:\Dicom_Files\Series_1`
The program creates one DICOM file for every frame of every multi-frame DICOM file within the C:\Dicom_Files\Series_1 folder (its sub-folders are ignored).
(If the folder name contains spaces use quotes: `dicommander -s -F "C:\Dicom Files\Series 1"`)

8) Convert DICOM 3 Part 10 files to NEMA2

- from command line run: *dicommander -n -f [selected folder]*
e.g. `dicommander -n -f C:\Dicom_Files\Series_1`
The program creates a NEMA2 file for every DICOM 3 Part 10 file within the C:\Dicom_Files\Series_1 folder and its sub-folders and saves it with a different name (the program adds a suffix in the file's name).
(If the folder name contains spaces use quotes: `dicommander -n -f "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -N -f [selected folder]*
e.g. `dicommander -N -f C:\Dicom_Files\Series_1`
The program creates a NEMA2 file for every DICOM 3 Part 10 file within the C:\Dicom_Files\Series_1 folder and its sub-folders and saves it with the same name (the program replaces the original file).
(If the folder name contains spaces use quotes: `dicommander -N -f "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -n -F [selected folder]*
e.g. `dicommander -n -F C:\Dicom_Files\Series_1`
The program creates a NEMA2 file for every DICOM 3 Part 10 file within the C:\Dicom_Files\Series_1 folder (its sub-folders are ignored) and saves it with a different name (the program adds a suffix in the file's name).
(If the folder name contains spaces use quotes: `dicommander -n -F "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -N -F [selected folder]*
e.g. `dicommander -N -F C:\Dicom_Files\Series_1`
The program creates a NEMA2 file for every DICOM 3 Part 10 file within the C:\Dicom_Files\Series_1 folder (its sub-folders are ignored) and saves it with the same name (the program replaces the original file).
(If the folder name contains spaces use quotes: `dicommander -N -F "C:\Dicom Files\Series 1"`)

9) Convert NEMA2 files to DICOM 3 Part 10

- from command line run: *dicommander -p -f [selected folder]*
e.g. `dicommander -p -f C:\Dicom_Files\Series_1`
The program creates a DICOM 3 Part 10 file for every NEMA2 file within the C:\Dicom_Files\Series_1 folder and its sub-folders and saves it with a different name (the program adds a suffix in the file's name).
(If the folder name contains spaces use quotes: `dicommander -p -f "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -P -f [selected folder]*
e.g. `dicommander -P -f C:\Dicom_Files\Series_1`
The program creates a DICOM 3 Part 10 file for every NEMA2 file within the C:\Dicom_Files\Series_1 folder and its sub-folders and saves it with the same name (the program replaces the original file).
(If the folder name contains spaces use quotes: `dicommander -P -f "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -p -F [selected folder]*
e.g. `dicommander -p -F C:\Dicom_Files\Series_1`
The program creates a DICOM 3 Part 10 file for every NEMA2 file within the C:\Dicom_Files\Series_1 folder (its sub-folders are ignored) and saves it with a different name (the program adds a suffix in the file's name).
(If the folder name contains spaces use quotes: `dicommander -p -F "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -P -F [selected folder]*
e.g. `dicommander -P -F C:\Dicom_Files\Series_1`
The program creates a DICOM 3 Part 10 file for every NEMA2 file within the C:\Dicom_Files\Series_1 folder (its sub-folders are ignored) and saves it with the same name (the program replaces the original file).
(If the folder name contains spaces use quotes: `dicommander -P -F "C:\Dicom Files\Series 1"`)

10) Convert compressed DICOM files to uncompressed

- from command line run: *dicommander -u -f [selected folder]*
e.g. `dicommander -u -f C:\Dicom_Files\Series_1`
The program creates an uncompressed DICOM file for every compressed DICOM file within the C:\Dicom_Files\Series_1 folder and its sub-folders and saves it with a different name (the program adds a suffix in the file's name).
(If the folder name contains spaces use quotes: `dicommander -u -f "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -U -f [selected folder]*
e.g. `dicommander -U -f C:\Dicom_Files\Series_1`
The program creates an uncompressed DICOM file for every compressed DICOM file within the C:\Dicom_Files\Series_1 folder and its sub-folders and saves it with the same name (the program replaces the original file).
(If the folder name contains spaces use quotes: `dicommander -U -f "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -u -F [selected folder]*
e.g. `dicommander -u -F C:\Dicom_Files\Series_1`
The program creates an uncompressed DICOM file for every compressed DICOM file within the C:\Dicom_Files\Series_1 folder (its sub-folders are ignored) and saves it with a different name (the program adds a suffix in the file's name).
(If the folder name contains spaces use quotes: `dicommander -u -F "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -U -F [selected folder]*
e.g. `dicommander -U -F C:\Dicom_Files\Series_1`
The program creates an uncompressed DICOM file for every compressed DICOM file within the C:\Dicom_Files\Series_1 folder (its sub-folders are ignored) and saves it with the same name (the program replaces the original file).
(If the folder name contains spaces use quotes: `dicommander -U -F "C:\Dicom Files\Series 1"`)

11) Convert uncompressed DICOM files to compressed

JPEG Compression

- from command line run: *dicommander -z -f [selected folder]*
e.g. `dicommander -z -f C:\Dicom_Files\Series_1`
The program creates a compressed file for every uncompressed DICOM file within the C:\Dicom_Files\Series_1 folder and its sub-folders and saves it with a different name (the program adds a suffix in the file's name).
(If the folder name contains spaces use quotes: `dicommander -z -f "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -Z -f [selected folder]*
e.g. `dicommander -Z -f C:\Dicom_Files\Series_1`
The program creates a compressed file for every uncompressed DICOM file within the C:\Dicom_Files\Series_1 folder and its sub-folders and saves it with the same name (the program replaces the original file).
(If the folder name contains spaces use quotes: `dicommander -Z -f "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -z -F [selected folder]*
e.g. `dicommander -z -F C:\Dicom_Files\Series_1`
The program creates a compressed file for every uncompressed DICOM file within the C:\Dicom_Files\Series_1 folder (its sub-folders are ignored) and saves it with a different name (the program adds a suffix in the file's name).
(If the folder name contains spaces use quotes: `dicommander -z -F "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -Z -F [selected folder]*
e.g. `dicommander -Z -F C:\Dicom_Files\Series_1`
The program creates a compressed file for every uncompressed DICOM file within the C:\Dicom_Files\Series_1 folder (its sub-folders are ignored) and saves it with the same name (the program replaces the original file).
(If the folder name contains spaces use quotes: `dicommander -Z -F "C:\Dicom Files\Series 1"`)

JPEG lossless Compression

- from command line run: *dicommander -x -f [selected folder]*
e.g. `dicommander -x -f C:\Dicom_Files\Series_1`
The program creates a compressed file for every uncompressed DICOM file within the C:\Dicom_Files\Series_1 folder and its sub-folders and saves it with a different name (the program adds a suffix in the file's name).
(If the folder name contains spaces use quotes: `dicommander -x -f "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -X -f [selected folder]*
e.g. `dicommander -X -f C:\Dicom_Files\Series_1`
The program creates a compressed file for every uncompressed DICOM file within the C:\Dicom_Files\Series_1 folder and its sub-folders and saves it with the same name (the program replaces the original file).
(If the folder name contains spaces use quotes: `dicommander -X -f "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -x -F [selected folder]*
e.g. `dicommander -x -F C:\Dicom_Files\Series_1`
The program creates a compressed file for every uncompressed DICOM within the C:\Dicom_Files\Series_1 folder (its sub-folders are ignored) and saves it with a different name (the program adds a suffix in the file's name).
(If the folder name contains spaces use quotes: `dicommander -x -F "C:\Dicom Files\Series 1"`)

- from command line run: *dicommander -X -F [selected folder]*
e.g. `dicommander -X -F C:\Dicom_Files\Series_1`
The program creates a compressed file for every uncompressed DICOM within the
C:\Dicom_Files\Series_1 folder (its sub-folders are ignored) and saves it with the same name (the
program replaces the original file).
(If the folder name contains spaces use quotes: `dicommander -X -F "C:\Dicom Files\Series 1"`)

12) Anonymize DICOM files

- from command line run: *dicommander -a [parameter file] -f [selected folder]*
e.g. `dicommander -a paramfile.txt -f C:\Dicom_Files\Series_1`
The program creates an anonymized DICOM file for every DICOM file within the C:\Dicom_Files\Series_1 folder and its sub-folders and saves it with a different name (the program adds a suffix in the file's name).
(If the folder name contains spaces use quotes: `dicommander -a paramfile.txt -f "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -A [parameter file] -f [selected folder]*
e.g. `dicommander -A paramfile.txt -f C:\Dicom_Files\Series_1`
The program creates a anonymized DICOM file for every DICOM file within the C:\Dicom_Files\Series_1 folder and its sub-folders and saves it with the same name (the program replaces the original file).
(If the folder name contains spaces use quotes: `dicommander -A paramfile.txt -f "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -a [parameter file] -F [selected folder]*
e.g. `dicommander -a paramfile.txt -F C:\Dicom_Files\Series_1`
The program creates a anonymized DICOM file for every DICOM file within the C:\Dicom_Files\Series_1 folder (its sub-folders are ignored) and saves it with a different name (the program adds a suffix in the file's name).
(If the folder name contains spaces use quotes: `dicommander -a paramfile.txt -F "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -A [parameter file] -F [selected folder]*
e.g. `dicommander -A paramfile.txt -F C:\Dicom_Files\Series_1`
The program creates a anonymized DICOM file for every DICOM file within the C:\Dicom_Files\Series_1 folder (its sub-folders are ignored) and saves it with the same name (the program replaces the original file).
(If the folder name contains spaces use quotes: `dicommander -A paramfile.txt -F "C:\Dicom Files\Series 1"`)

The parameter file format for anonymizing

The parameter file is a plain text file, editable with the notepad.

It contains tags to be anonymized and rectangles to be filled with a solid color (for "burned-in" annotation removal).

There are rectangles for single-frames files, rectangles for multi-frames files, and rectangles for both file types, that is because (e.g. in ultrasound files) single-frames files have different sizes from multi-frame files.

The program uses the color value of the upper left pixel of the rectangle, as the rectangle's fill color

The information is organized in lines (one line per rectangle or tag) as follows:

[rectangle type] [left] [top] [right] [bottom]

[tag group] [tag element] ([Value Representation] [Value])

The rectangle type can be one of the keys:

ri (rectangle for single-frame files), **rv** (rectangle for single-frame files), **r** (rectangle for both file types)

Example:

```
r 10 10 20 20  
ri 150 150 250 350  
rv 50 50 75 100  
0010 0010 PN ANONYMIZED  
0010 0020
```

With above parameters the program:

- a) in single-frame files, fills the rectangles (10 10 20 20) and (150 150 250 350)
- b) in multi-frame files, fills the rectangles (10 10 20 20) and (50 50 75 100)
- c) modifies the patient's name tag (0010, 0010) to ANONYMIZED
- d) removes the value of the patient's ID tag (0010, 0020)

13) Modify DICOM files (insert/remove/modify header's tags)

- from command line run: *dicommander -m [parameter file] -f [selected folder]*
e.g. `dicommander -m paramfile.txt -f C:\Dicom_Files\Series_1`
The program creates a modified DICOM file for every DICOM file within the C:\Dicom_Files\Series_1 folder and its sub-folders and saves it with a different name (the program adds a suffix in the file's name).
(If the folder name contains spaces use quotes: `dicommander -m paramfile.txt -f "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -M [parameter file] -f [selected folder]*
e.g. `dicommander -M paramfile.txt -f C:\Dicom_Files\Series_1`
The program creates a modified DICOM file for every DICOM file within the C:\Dicom_Files\Series_1 folder and its sub-folders and saves it with the same name (the program replaces the original file).
(If the folder name contains spaces use quotes: `dicommander -M paramfile.txt -f "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -m [parameter file] -F [selected folder]*
e.g. `dicommander -m paramfile.txt -F C:\Dicom_Files\Series_1`
The program creates a modified DICOM file for every DICOM file within the C:\Dicom_Files\Series_1 folder (its sub-folders are ignored) and saves it with a different name (the program adds a suffix in the file's name).
(If the folder name contains spaces use quotes: `dicommander -m paramfile.txt -F "C:\Dicom Files\Series 1"`)
- from command line run: *dicommander -M [parameter file] -F [selected folder]*
e.g. `dicommander -M paramfile.txt -F C:\Dicom_Files\Series_1`
The program creates a modified DICOM file for every DICOM file within the C:\Dicom_Files\Series_1 folder (its sub-folders are ignored) and saves it with the same name (the program replaces the original file).
(If the folder name contains spaces use quotes: `dicommander -M paramfile.txt -F "C:\Dicom Files\Series 1"`)

The parameter file format for modification

The parameter file is a plain text file, editable with the notepad.

The information is organized in lines (one line per action) as follows:

[action] [tag group] [tag element] ([Value Representation] [Value])

The action can be one of the letters: i (for insert), m (for modify), r (for remove)

Example:

```
m 0010 0010 PN ANONYMIZED  
r 0010 0020  
i 0011 0030 FD 3.14159
```

With above parameters the program modifies the patient's name to ANONYMIZED, removes the patient's ID (0010, 0020), and inserts the custom tag (0011, 0030).