

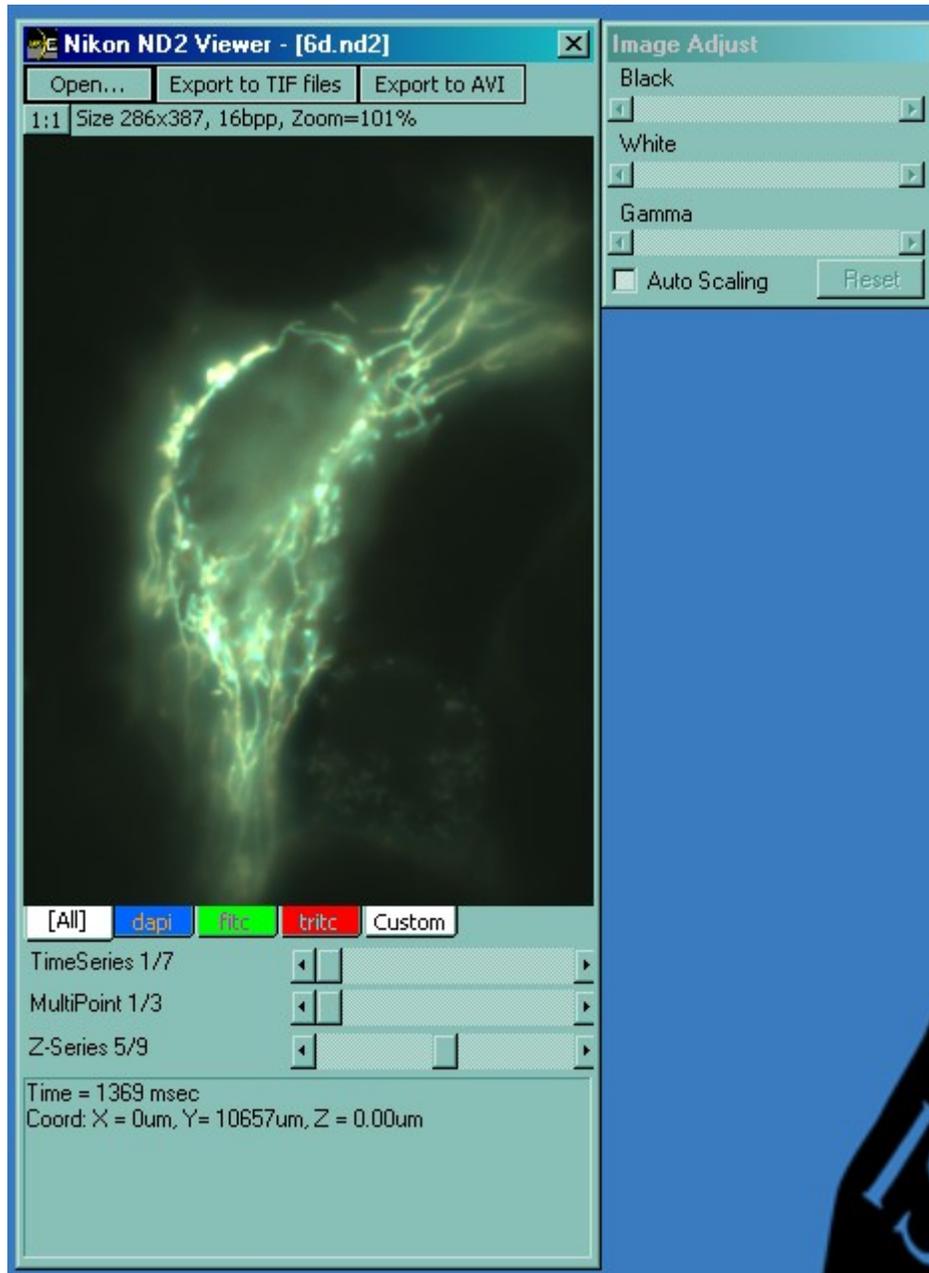
# How to Use the Nikon ND2 Viewer

## *Installation*

1. To start the installation process for the Nikon ND2 Viewer, download the following installation file: 'NikonNd2Viewer.msi'
2. Double click on the 'NikonNd2Viewer.msi' installation file to start the installation process.
3. Follow the instructions.
4. The installer creates a Desktop icon 'Nikon ND2 Viewer' for launching the Viewer.

## Launching the Viewer

1. Double click on 'Nikon ND2 Viewer' icon on the Desktop.
2. Click 'Open...' button and specify ND2 file.
3. The viewer will now look like the screen capture below.



The above is with full 6 dimension (channel, XY, Time, Z, Multi-point) ND2 file. Depending on the dimensions in ND2 file, some of the GUI will not be shown.

## Using the Viewer

### Controlling dimensions

The channel dimension is shown as tabs below the image, and other dimensions are shown as scrollbars. Channel dimension tabs include “All” and “Custom” other than the channels contained in the ND2 file. “All” shows all the channels (dapi, fits, tritc, in the above example). “Custom” shows user specified channel(s).



### Changing channel attributes

The color assigned to individual channels can be changed by right clicking on the tab, and selecting “Color” in the pop-up menu.

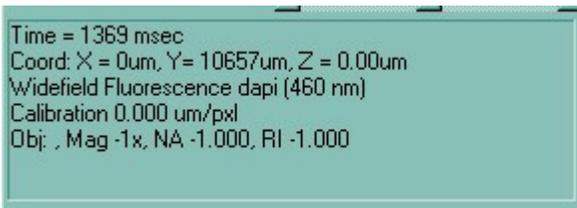


Right clicking “Custom” channel shows a pop-up menu with individual channels. Select one of them to turn it on/off. By default, all the channels are selected when ND2 file is opened.



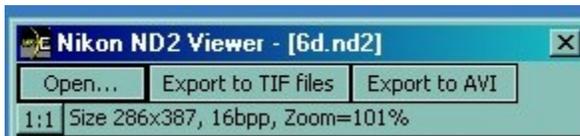
### Image attributes

The text box at the bottom shows individual image attributes. It will be updated as dimensions are controlled by tabs and scrollbars.



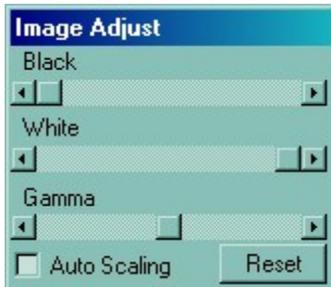
## Zooming the image

By default, the entire image is always shown. To zoom in, simply make the viewer window bigger. This shows the entire image bigger than actual size, effectively zoomed in. If the actual image size is bigger than the current viewer window size, clicking toggle button “1:1” above the image (below “Open...” button) shows the image in the actual size. Scrollbars will appear to change the viewing area.



## Image Adjust

The viewer shows floating dialog box as below.



This adjusts black, white levels and gamma for individual channel. By default, black and white levels are set to minimum and maximum intensity values of the first image for the channel.

If “Auto Scaling” check box is checked, black and white levels are always set to minimum and maximum intensity values of the current image.

“Reset” button resets black and white levels to minimum and maximum intensity values of the current image.

## Exporting

Images in ND2 file can be exported to series of TIFF files or an AVI file by clicking on corresponding buttons above the image. If there are multiple dimensions in ND file, the dialog box will appear to select them.



TIFF Export dimension selection:



AVI Export dimension selection:

