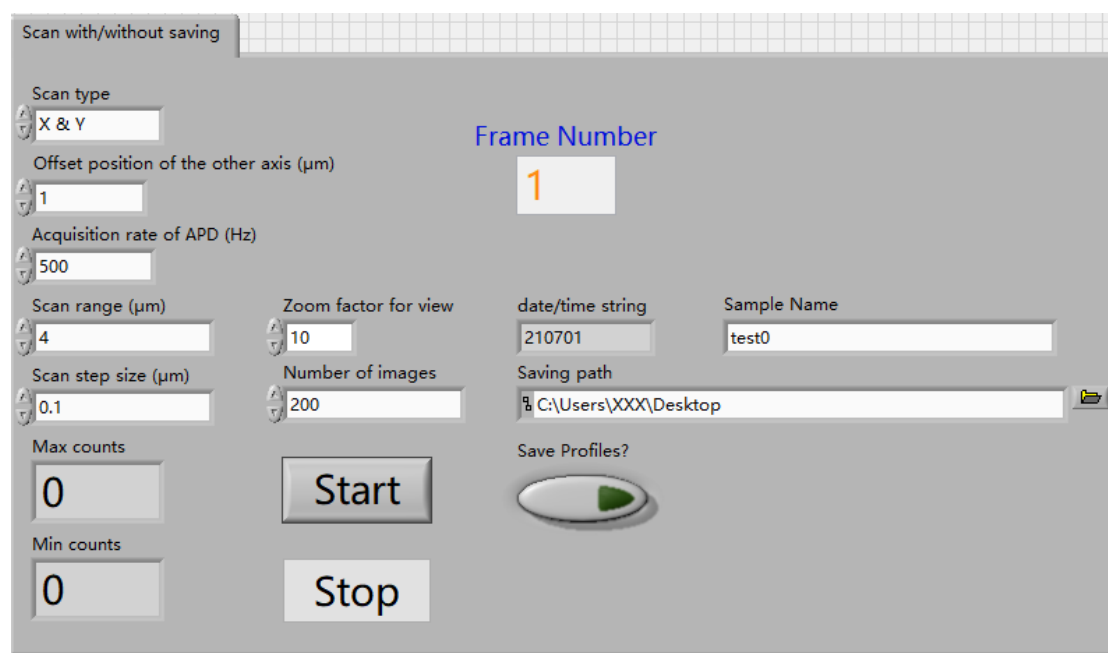


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The customer-designed Labview programmes are for scanning PSFs of confocal and STED system. We update two programmes for PMT and APD capturing, whose folder names begin with APD and PMT respectively.

These programmes are designed and uploaded by Xinzhu Xu, Kun Zhao, Zhaoyang Wu, Wei Ren, Wentao Yu, Chendi Shao, Kebin Shi, Peng Xi, Peking University. They are supplement materials of "", so, if use please cite this paper.

Operation interface is shown below:



Operation illustrations:

① **Scan type:**

X &Y: Scanning lateral PSF

X &Z: Scanning axial PSF

② **Offset position of the other axis:**

Offset **Z** position to center PSF when on X &Y scan

Offset **Y** position to center PSF when on X &Z scan

③ **Acquisition rate of APD/PMT**

Setting acquisition rate of detector in both two programmes and usually, it ranges from several hundreds to several thousands Hz in our experiments.

④ **Scan range:** Scan FOV in μm

⑤ **Scan step size:** Piezo stage scanning step

⑥ **Zoom factor for view:** When previewing, it will magnify the preview figure size but will not affect the size of saving figure.

- ⑦ **Number of images:** The image number you want to capture or preview
- ⑧ **Date/time string:** The date you do experiment which will become a part of your folder name
- ⑨ **Sample name:** Please name your sample for saving data
- ⑩ **Saving path:** Choose path to save your figure. If it doesn't exist, program will create one.

After setting all parameters, there are two modes for previewing or saving data

Preview Mode: Click "Saving Profiles?" off and "Start", the program will only display magnified figures and no data will be saved, but the folder will still be created.

Saving Mode: Click "Saving Profiles?" on and "Start", the program will automatically save data you capture.