

Controlling X-Cite NOVEM™ with TURBO Drivers in Third-Party Imaging Software

(Grouping: How to select which 6 of the 9 channels will be controlled)

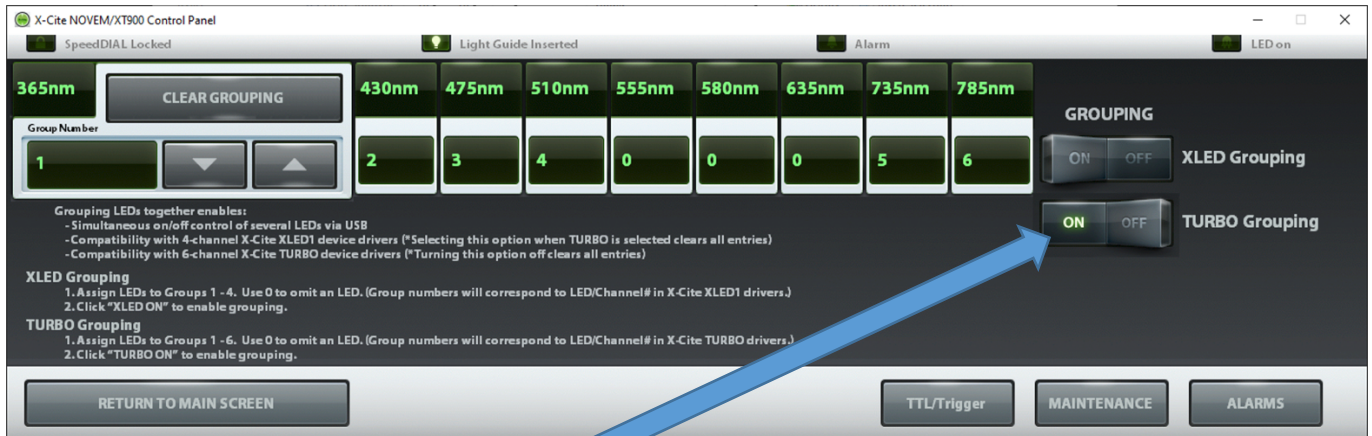
Below are instructions on how to correctly use the grouping function in the NOVEM GUI in order for third-party software to control the NOVEM using TURBO drivers. Although the NOVEM has nine channels, TURBO drivers only support six channels, so you must select which six of nine channels are needed.

Important note: If fewer than six channels are needed (i.e only DAPI, FITC, TRITC, or Cy5) you must still choose six channels (ignore the ones you do not need). Failure to define six groups may result in errors.

1. Download and install the latest NOVEM/XT900 Control Panel. [Click on NOVEM software tab to download Control Panel.](#)
2. Launch NOVEM/XT900 Control Panel.



3. Click on the Grouping button.



4. Select "ON" for the TURBO grouping.

**** Most important ****

Even if fewer channels are needed, you **MUST** assign **numbers 1,2,3,4,5,6** (with zeros in any remaining positions that are not needed) in order for the TURBO driver to work in third-party software. If two or more channels are to be used simultaneously, they need to be assigned the SAME number (ie: both 2,2 etc.). Use the up/down buttons or click on the number to edit each of the nine channels.

For reference, below are the channel numbers and their corresponding wavelengths.

Fluorophore	Wavelength	LED Position				Notes
		XT910	XT920	XT930	XT940	
FURA-2	340			9		
DAPI	365	1			1	
DAPI	385		1	1		
CFP	435	2	2	2	2	
FITC	475	3	3	3	3	
YFP, TRITC, mCherry	HD (LaserLED Hybrid Drive® 500-600)	4	4	4		Powered by LaserLED Hybrid Drive. 500-600nm broad peak, selectable with motorized rotary filter changer
		5	5	5	4	
		6	6	6	5	
		7	7	7	6	
Cy5	635	8	8	8	7	
Cy7	735	9	9		8	
IR800	785				9	

Each NOVEM has channels numbered from lowest to highest wavelength. The only exception to this is the NOVEM XT930 – FURA, where 340 nm is channel 9 instead of channel 1.

- Close the NOVEM/XT900 Control Panel. Settings will be saved automatically.
- Launch imaging software. Proceed as you normally would, selecting “X-Cite TURBO” as the light source.