

### CCD3 information

Name		<b>CCD3</b>
Make/Description		ZEISS AXIOVERT 200, RS camera + Micro-injector
Upright/Inverted?		Inverted
Optimized for live/fixed cells?		Yes (incubation box, 5 % CO <sub>2</sub> , 37degreesC)
Detection System		12 bit CCD
Computer controlled	Time series	Yes
	Z-series	No
	Multiple wavelengths	Phase plus one fluorescent only

### OBJECTIVES

Position	1	2	3	4	5	6
Objective type	NEOFLUAR	LD ACHRO-PLAN	PLAN - NEOFLUAR	NEOFLUAR	PLAN APO-CHROMAT	PLAN-ACHROMAT
<b>Mag</b>	<b>10x</b>	<b>20x</b>	<b>20x</b>	<b>40x</b>	<b>63x</b>	<b>100x</b>
Contrast method	BF / Ph1/ FL	BF / Ph2 / FL	BF / Ph2 / DICII / FL	BF / Ph2 / FL	BF / Ph3 / DICIII / FL	BF / Ph3 / DICIII / FL
Numerical Aperture	0.3	0.4	0.5	0.75	1.4	1.4
Cover glass thickness	0.17	0 – 1.5	0.17	0.17	0.17	0.17
Correction collar	No	Yes	No	No	No	No
<b>Immersion liquid</b>	<b>Air</b>	<b>Air</b>	<b>Air</b>	<b>Air</b>	<b>Oil</b>	<b>Oil</b>
Correction		Sufficient field flatness	Monochromatic & chromatic correction for the focal plane		fully corrected for a finite layer thickness enclosing the focal plane, & flat field correction	fully corrected for a finite layer thickness enclosing the focal plane, & flat field correction
Objective qualities		Good for long working distances	Very good universal objective, ideal for fluorescence, high transmission		maximum resolving power, color purity, contrast & image flatness. Excellent, ideal for confocal microscopy	maximum resolving power, color purity, contrast & image flatness. Excellent, ideal for confocal microscopy

### FILTER CUBES

Position (left of cube facing you)	Shortcut on metamorph desktop e.g.probe	Zeiss Filter cube number	Colour of excitation	Colour of emission (approx)	Excitation wavelength	Dichroic beamsplitter	Emission wavelength
1	TEX RED	00	Green/yellow	Red	BP530-585	FT600	LP615
2	DAPI	02	Ultra-violet blue	Blue-red	G365	FT395	LP420
3	FITC	10	True blue	Green	BP450-490	FT510	515-565
4	GFP	13	Blue/green	Blue/green	470/20	FT493	505-530
5	CY3 / RHODAMINE	15	Green	Red	BP456/12	FT580	HQ 610/ 75M