**3. Instrument Details**

**3.1. Instrument Manufacturer**

BD Biosciences

http://www.bdbiosciences.com/home/

**3.2. Instrument Model**

BD FACSAria II Flow Cytometer, PN 632182

Serial Number: P18200025

Manufactured: 02/2009

Pre-shipment QC: 2/18/2009

**3.3. Instrument Configuration and Settings**

3.3.1. Flow Cell and Fluidics

The instrument has upgraded. It has a fixed-alignment square cuvette flow cell with four-laser excitation

3.3.2. Light Sources

The instrument has been altered, four-laser base configuration with ACDU

- 488-nm Coherent Sapphire solid state; 18mW

- 633-nm JDS Uniphase HeNe air-cooled; 18mW

- 407-nm iFlex2000 Violet solid state; 30mW

-561-nm Coherent Sapphire solid state; 50mW, BD part# 647935 manufactured: 7/10/14

3.3.3. Excitation Optics Configuration

The instrument has been altered. Current configuration includes trigon for 488nm, trigon for 633nm, octagon for 407nm, and octagon for 561nm.

3.3.4. Optics Filter

The instrument can accept optical configuration changes. Refer to the attached configurations found below.

3.3.5. Optical Detectors

Baseline voltages are provided in the configuration tables.

3.3.6. Optical Paths

Optical filters are removable. The following tables provide various optical configurations that have been used.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Configuration Name:  70u 70psi USC 488-561-633-405 (3-5-3-6) | | | | | |
| Laser | Detector  Position | PMT Name | Dicroic  Mirror | BP Filter | Baseline Voltage  EXPIRES  7/31/15 |
| Blue | FSC | FSC (Diode) | None | 488/10 | 300 |
| Blue | A | 488 B 695/40 | 535LP | 695/40 | 587 |
| Blue | B | 488 B 510/20 | 502LP | 510/20 | 646 |
| Blue | C | SSC | none | 488/10 | 403 |
| Red | A | 633 R 780/60 | 755LP | 780/60 | 465 |
| Red | B | 633 R 730/45 | 690LP | 730/45 | 453 |
| Red | C | 633 R 660/20 | none | 660/20 | 548 |
| Violet | A | 405 V 780/60 | 755LP | 780/60 | 585 |
| Violet | B | 405 V 730/45 | 690LP | 730/45 | 554 |
| Violet | C | 405 V 670/14 | 655LP | 670/14 | 692 |
| Violet | D | 405 V 616/23 | 600LP | 616/23 | 640 |
| Violet | E | 405 V 530/30 | 502LP | 530/30 | 616 |
| Violet | F | 405 V 450/50 | none | 450/50 | 449 |
| Violet | G | empty | empty |  |  |
| Violet | H | empty | empty |  |  |
| YellowGreen | A | 561 YG 780/60 | 755LP | 780/60 | 512 |
| YellowGreen | B | 561 YG 710/50 | 685LP | 710/50 | 485 |
| YellowGreen | C | 561 YG 670/14 | 630LP | 670/14 | 600 |
| YellowGreen | D | 561 YG 610/20 | 600LP | 610/20 | 491 |
| YellowGreen | E | 561 YG 582/15 | 556LP | 582/15 | 448 |
| YellowGreen | F | empty | empty |  |  |
| YellowGreen | G | empty | empty |  |  |
| YellowGreen | H | empty | empty |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Configuration Name:  100u 23psi USC 488-561-633-405 (3-5-3-6) | | | | | |
| Laser | Detector  Position | PMT Name | Dicroic  Mirror | BP Filter | Baseline Voltage  EXPIRES 7/31/15 |
| Blue | FSC | FSC (Diode) | None | 488/10 | 300 |
| Blue | A | 488 B 695/40 | 535LP | 695/40 | 610 |
| Blue | B | 488 B 510/20 | 502LP | 510/20 | 651 |
| Blue | C | SSC | none | 488/10 | 405 |
| Red | A | 633 R 780/60 | 755LP | 780/60 | 468 |
| Red | B | 633 R 730/45 | 690LP | 730/45 | 451 |
| Red | C | 633 R 660/20 | none | 660/20 | 560 |
| Violet | A | 405 V 780/60 | 755LP | 780/60 | 599 |
| Violet | B | 405 V 730/45 | 690LP | 730/45 | 565 |
| Violet | C | 405 V 670/14 | 655LP | 670/14 | 717 |
| Violet | D | 405 V 616/23 | 600LP | 616/23 | 653 |
| Violet | E | 405 V 530/30 | 502LP | 530/30 | 641 |
| Violet | F | 405 V 450/50 | none | 450/50 | 461 |
| Violet | G | empty | empty |  |  |
| Violet | H | empty | empty |  |  |
| YellowGreen | A | 561 YG 780/60 | 755LP | 780/60 | 522 |
| YellowGreen | B | 561 YG 710/50 | 685LP | 710/50 | 493 |
| YellowGreen | C | 561 YG 670/14 | 630LP | 670/14 | 616 |
| YellowGreen | D | 561 YG 610/20 | 600LP | 610/20 | 493 |
| YellowGreen | E | 561 YG 582/15 | 556LP | 582/15 | 454 |
| YellowGreen | F | empty | empty |  |  |
| YellowGreen | G | empty | empty |  |  |
| YellowGreen | H | empty | empty |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Configuration Name:  85u 45psi USC 488-561-633-405 (3-5-3-6) | | | | | |
| Laser | Detector  Position | PMT Name | Dicroic  Mirror | BP Filter | Baseline Voltage  EXPIRES 5/31/15 |
| Blue | FSC | FSC (Diode) | None | 488/10 | 300 |
| Blue | A | 488 B 695/40 | 535LP | 695/40 | 601 |
| Blue | B | 488 B 510/20 | 502LP | 510/20 | 657 |
| Blue | C | SSC | none | 488/10 | 399 |
| Red | A | 633 R 780/60 | 755LP | 780/60 | 476 |
| Red | B | 633 R 730/45 | 690LP | 730/45 | 457 |
| Red | C | 633 R 660/20 | none | 660/20 | 561 |
| Violet | A | 405 V 780/60 | 755LP | 780/60 | 620 |
| Violet | B | 405 V 730/45 | 690LP | 730/45 | 589 |
| Violet | C | 405 V 670/14 | 655LP | 670/14 | 673 |
| Violet | D | 405 V 616/23 | 600LP | 616/23 | 629 |
| Violet | E | 405 V 530/30 | 502LP | 530/30 | 628 |
| Violet | F | 405 V 450/50 | none | 450/50 | 444 |
| Violet | G | empty | empty |  |  |
| Violet | H | empty | empty |  |  |
| YellowGreen | A | 561 YG 780/60 | 755LP | 780/60 | 524 |
| YellowGreen | B | 561 YG 710/50 | 685LP | 710/50 | 500 |
| YellowGreen | C | 561 YG 670/14 | 630LP | 670/14 | 623 |
| YellowGreen | D | 561 YG 610/20 | 600LP | 610/20 | 495 |
| YellowGreen | E | 561 YG 582/15 | 556LP | 582/15 | 464 |
| YellowGreen | F | empty | empty |  |  |
| YellowGreen | G | empty | empty |  |  |
| YellowGreen | H | empty | empty |  |  |

**3.4. Other Relevant Instrument Details**

* BD FACSAria II User’s Guide:

PN# 643245 Rev A

* BD FACSDiva Software Reference Manual

PN# 642213

* BD Cytometer Setup and Tracking Application Guide

PN#642342 Rev A