

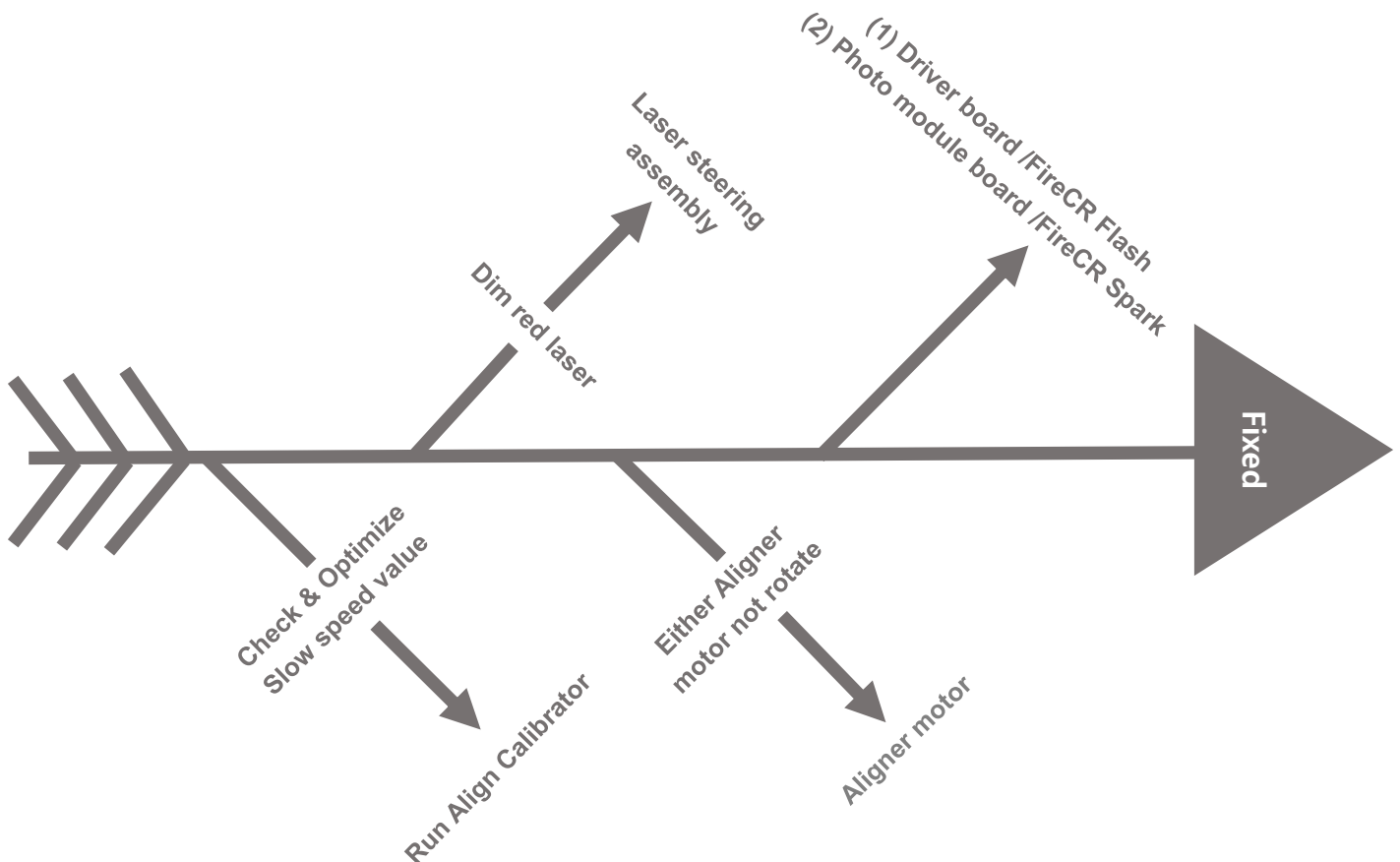
- **Model**

FireCR Flash AA
FireCR Flash AB
FireCR Flash AC
FireCR Flash AD / FireCR Spark

- **The Description of the Problem**

Auto alignment failure

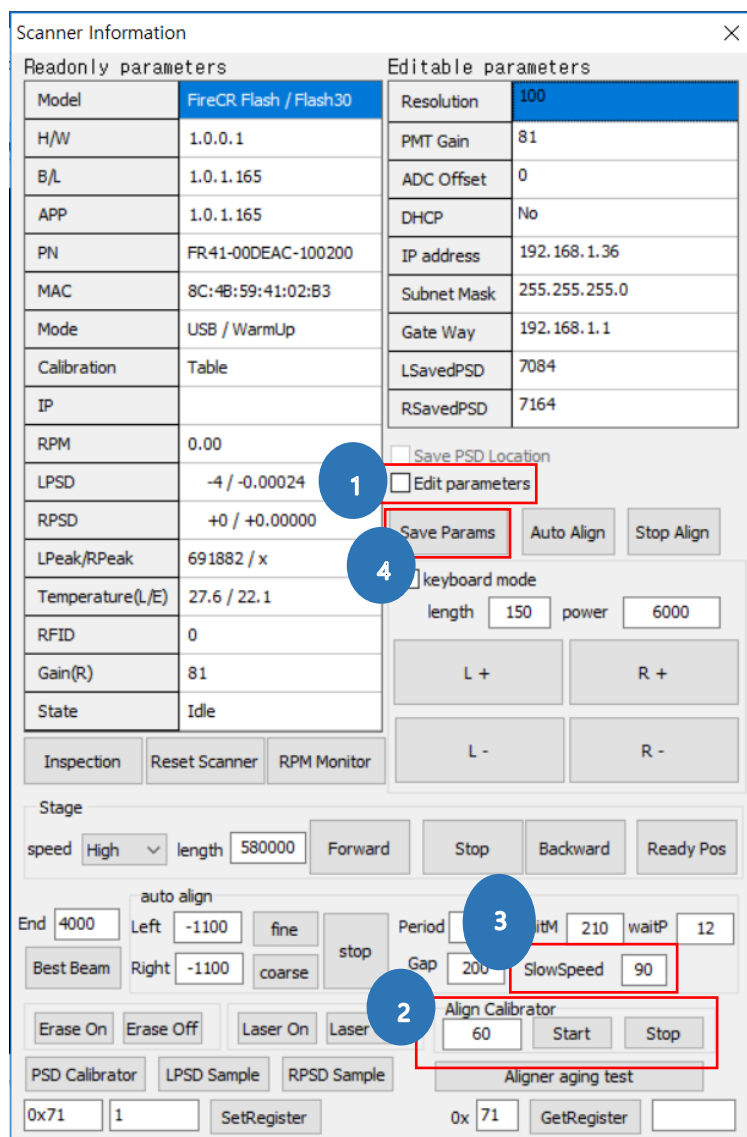
- **Fishbone Diagram**



Check & Optimize the slow speed value

How to run Align Calibrator

- 1) Tick Edit parameters.
- 2) Run Align Calibrator, then enter aligner calibrator value in the SlowSpeed blank.
- 3) Click Save Params, then reboot both scanner and Quantor+.
- 4) Confirm if slow speed value is saved..



Dim laser or Dead laser

- 1) Run Auto Align.
- 2) Check the LPSD and RPSD values while auto aligning.
- 3) If they are permanent zero, either dim laser or dead laser could cause auto align failure.
- 4) Take off the covers, then visually have a look at the red laser brightness.

Readonly parameters		Editable parameters	
Model	FireCR Flash / Flash30	Resolution	100
H/W	1.0.0.1	PMT Gain	81
B/L	1.0.1.165	ADC Offset	0
APP	1.0.1.165	DHCP	No
PN	FR41-00DEAC-100200	IP address	192.168.1.36
MAC	8C:4B:59:41:02:B3	Subnet Mask	255.255.255.0
Mode	USB / WarmUp	Gate Way	192.168.1.1
Calibration	Table	LSavedPSD	7084
IP		RSavedPSD	7164
RPM	0.00		
LPSD	-4 / -0.00024		
RPSD	+0 / +0.00000		
LPeak/RPeak	691882 / x		
Temperature(L/E)	27.6 / 22.1		
RFID	0		
Gain(R)	81		
State	Idle		

Auto alignment motor

- 1) Check LPSD and RPSD values are changed while clicking L+ and L- several times.
- 2) If LPSD and RPSD values are not changed, an aligner motor L could be an issue.
- 3) Check LPSD and RPSD values are changed while clicking R+ and R- several times.
- 4) If LPSD and RPSD values are not changed, an aligner motor R could be an issue.
- 5) Take off the covers, then visually check if either aligner motor is rotated.

The screenshot shows the 'Scanner Information' window with two main sections: 'Readonly parameters' and 'Editable parameters'. The 'LPSD' and 'RPSD' values are highlighted with a red box and a blue circle labeled '2'. The 'L+' and 'L-' buttons are highlighted with a red box and a blue circle labeled '1'. Below the parameters, there are various control buttons and input fields for alignment, including 'Save Params', 'Auto Align', 'Stop Align', 'keyboard mode', 'length', 'power', 'L+', 'R+', 'L-', 'R-', 'Stage', 'speed', 'length', 'Forward', 'Stop', 'Backward', 'Ready Pos', 'auto align', 'End', 'Left', 'Right', 'Period', 'waitM', 'waitP', 'Gap', 'SlowSpeed', 'Align Calibrator', 'Erase On', 'Erase Off', 'Laser On', 'Laser Off', 'PSD Calibrator', 'LPSD Sample', 'RPSD Sample', 'Aligner aging test', '0x71', '1', 'SetRegister', '0x 71', 'GetRegister'.

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Main board

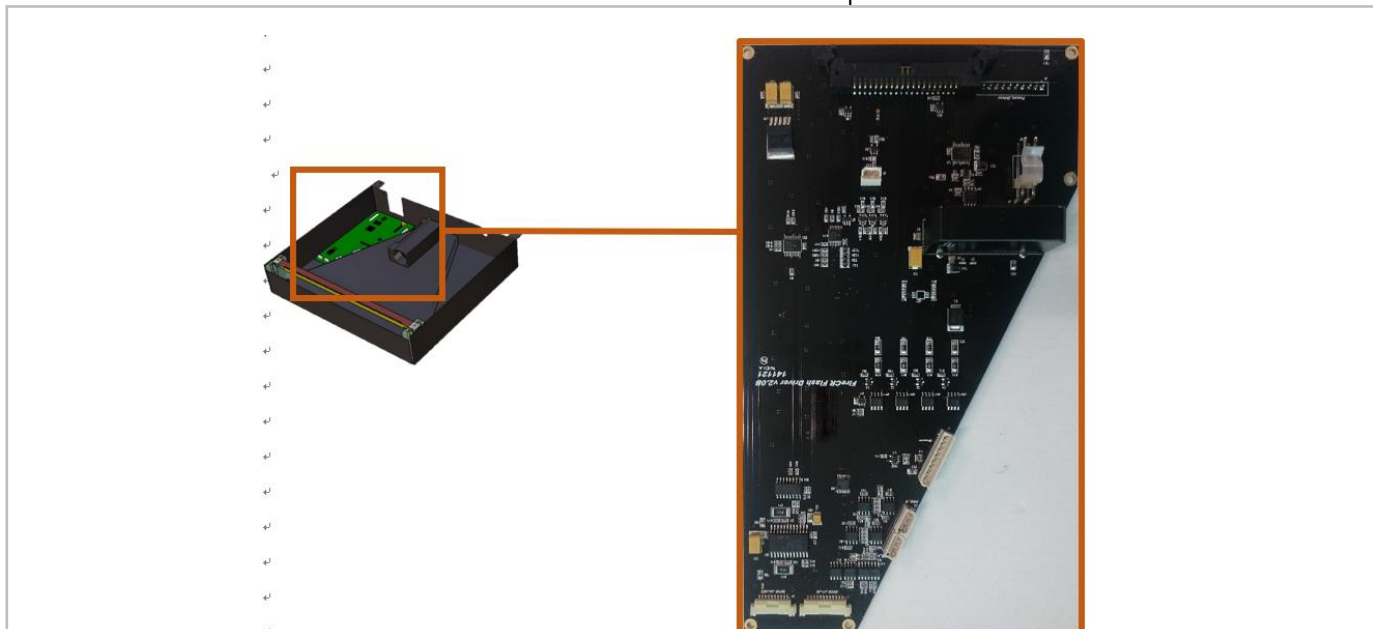
- 1) If the problem still remains even after replacing the align motors, you need to replace the main board
- 2) Need to check the voltage of the part where Main board and Align motor cable are connected after starting the auto align: if voltage is higher than 10v, then it's ok. If not, there is a problem with the Main board.



- Remove the Align motor cable and press the 'Auto Align' in Scanner control.
- Check the voltage at the part located in the red rectangle of the picture.
- Normal voltage: $\geq 10V$, Faulty voltage : $\leq 10V$

Driver board or Photo Module board

Please refer to the FireCR Flash Service manual for Driver board replacement



Please refer to the FireCR Spark Service manual for Photo module board replacement.

